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ABSTRACT

This booklet presents a research-based rationale for teaching economics at the middle/junior high school level in the United States. Chapter 1, "Introduction," describes the project in which the rationale was developed and outlines the remainder of the document. Chapter 2, "Elements of a Rationale for Middle School Economic Education," presents some historical background on economic education in the United States. It examines societal forces that may have an impact on economic education and discusses the elements of a rationale. Chapter 3, "The Middle/Junior High School in the United States," looks at various dimensions of this level of schooling. Understanding the nature of the institution being asked to include economics in the curriculum is necessary to building an effective rationale. Chapter 4, "The Experience of the Young Adolescent," summarizes both the cognitive development and socialization literature on 12- to 15-year old learners. Schooling's potential to influence the young adolescent is also examined. Chapter 5, "Economic Experience and Understanding of the Young Adolescent," looks at the 12- to 15-year old as a participant in the economy, both as a labor force participant and as a consumer. The chapter also summarizes the research on the young adolescent's knowledge of economics. Chapter 6, "Middle School Economic Education," presents major recommendations for economic education. The rationale for middle school economics education is set forth and program goals are established. Finally, an economic education blueprint for the 12- to 15-year old learner is offered. Chapter 7 emphasizes conclusions from the research which have implications for economic education at the middle/junior high level. Recommendations are made to the Foundation for Teaching Economics. The recommendation categories are: collaborative relationships, the middle/junior high schools, curriculum materials development, and research. The documents also includes a list of references. (APG)

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TEACHING ECONOMICS TO YOUNG ADOLESCENTS

A RESEARCH-BASED RATIONALE

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Teaching Economics to Young Adolescents
A Research-Based Rationale

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Foundation for Teaching Economics
San Francisco, California

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FOREWORD

As the nation's leading advocate of economic education in grades 7 to 10, the Foundation for Teaching Economics is committed to giving young adolescents an understanding of how our economy works in order to prepare them to be economically literate voters, wise consumers and productive citizens of our society.

This publication, entitled *Teaching Economics to Young Adolescents: A Research-Based Rationale*, is the report of an extensive study which was sponsored by the FTE to gain a better understanding of the intellectual, psychological, social, and economic development of young adolescents in order to create more effective instructional methods and materials.

The FTE is convinced that early adolescence is an especially appropriate time to give students their first major introduction to how our economy works and, in the process, develop sound economic reasoning and decision-making skills. This study strongly supports our view and argues persuasively that economic education should be an essential ingredient of any educational curriculum for young adolescents.

The FTE is especially grateful to the J. Howard Pew Freedom Trust, the Laird, Norton Foundation, Chevron Corporation, and Wallace R. Hawley for their generous contributions which enabled this study and the publication of this report.

On behalf of the authors of this report and the FTE, we are pleased to share with you these important conclusions and the data which supports them. We welcome your comments and suggestions as well as any further information you may have regarding other research pertinent to economic education for young adolescents.

William M. Hassebrock
President
Foundation for Teaching Economics

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James E. Davis
Project Director

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Chapter 1

INTRODUCTION

Young people today encounter various aspects of the economy in their daily lives. They deal with such institutions as retail stores, banks, and government agencies. They purchase goods and services such as fast food, records, and hair styling. They observe their friends, parents, and others making economic decisions. They are becoming aware of markets, of resource use, of competition among buyers and sellers. Young people pay taxes and receive some of the benefits of government spending.

What information about the economy does the young person, aged 12 to 15, need to understand and use economic reasoning? How do institutions in the economy function, and how do these institutions facilitate human interaction? What kinds of choices about products and services are available to the young adolescent, and how do these choices involve economic reasoning? What kinds of roles will students themselves play in the economic system? How does an economic system, which seems disorganized, function to provide a continuous stream of goods and services? These are just a few of the important questions to be considered in developing a rationale for teaching economics at the middle/junior high school level.

This paper presents a research-based rationale for the teaching of economics at the middle/junior high school level in the United States. Because the main focus of this inquiry is on economic education and the middle school learner, the rationale does not address the many important issues and problems associated with implementation. Problems of curriculum change, preservice and inservice education, and implementing mandated outcomes are not addressed.

In this introduction, we describe the project in which the rationale was developed. The project was conducted by the Foun-

dation for the Development of Learning Technologies in Boulder, Colorado, with support from the Foundation for Teaching Economics, San Francisco, California. The sections that follow describe these two organizations, as well as a major seminar held as part of the project. The final section of the introduction outlines the remainder of the paper.

The Foundation for Teaching Economics

The Foundation for Teaching Economics was founded in 1975. Its main purpose is to improve the quality and quantity of economics instruction in the United States by working with school systems to make the study of economics an integral part of a basic middle/junior high school curriculum. The foundation has long been convinced that the middle/junior high school—grades 6, 7, 8, and 9—is the ideal time to introduce students to how our economy works. To the foundation, economic education for this age group is almost as important as instruction in reading, writing, and arithmetic.

In its ten years of operation, the foundation has been responsible for development of the nation's largest-selling junior high economics textbook, *Our Economy: How It Works* (published by Addison-Wesley Publishing Company). More recently, the foundation has supported development of a series of six filmstrips to accompany *Our Economy* and a film on the role of entrepreneurs in the economy. Its most recent project, Economics Today, uses the *USA TODAY* newspaper to teach economics through current events. In addition, the foundation works closely with national social studies and economic education professional organizations and with school districts, promoting the teaching of economics.

The foundation decided in early 1985 that its ten years of activity deserved careful reflection and possible redirection. Among the questions the foundation asked itself were the following: Is there a sound research base for middle/junior high school economic education? If so, what does the research say? Is the current direction of the foundation appropriate, given the nature of schooling in the United States? How can the foundation improve its approach to assure that its major goal is reached?

Seeking responses to the first two questions, the foundation provided grant funds to the Foundation for Development of Learning

Technologies (FDLT) to examine the research literature and report upon its findings to the foundation's trustees.

The Foundation for Development of Learning Technologies

The Foundation for Development of Learning Technologies was established in 1984 in Boulder, Colorado. Its major purpose is to determine ways in which our nation's education can be improved through future use of thoughtful combinations of teaching and learning research and technology. FDLT believes that only through thoughtful consideration of educational research can that research be put into practice via technological improvements.

Project Seminar

In early 1985, FDLT hosted a working seminar to develop the background materials for a sound, research-based rationale and conceptual framework for the teaching of economics at the middle/junior high school level. FDLT was able to bring together several leading educators engaged in research, curriculum development, and dissemination in general social studies and in economic education. The participants, their affiliations, and areas of expertise were:

- Dr. Beverly Armento, Director, Center for Business and Economic Education, Georgia State University, Atlanta, Georgia (Concept Learning Research, Economic Education)
- Dr. Ronald Banaszak, Vice President, Educational Programs, Foundation for Teaching Economics, San Francisco, California (Social Studies Curriculum Development, Economic Education)
- Dr. James E. Davis, President, Foundation for Development of Learning Technologies, Boulder, Colorado (Social Science Education Curriculum and Instruction, Educational Change, Economic Education)
- Ms. Sharryl Davis-Hawke, Executive Vice President, Graphic Learning Corporation, Boulder, Colorado (Social Studies Education Research, Social Studies Curriculum Development)

- Mr. William Hassebrock, President, Foundation for Teaching Economics, San Francisco, California (Management, Economic Education)
- Dr. James Leming, Associate Professor of Curriculum and Instruction, Southern Illinois University, Carbondale, Illinois (Curriculum and Instruction, Research on Socialization)
- Dr. Sharon Muir, Associate Professor, School of Education, Oklahoma State University, Stillwater, Oklahoma (Cognitive Development, Concept Learning)
- Dr. Mark Schug, Associate Professor, School of Education, University of Wisconsin-Milwaukee, Milwaukee, Wisconsin (Economic Education, Research on Economic Concept Learning)
- Dr. Donald Wentworth, Professor of Economics and Education, Pacific Lutheran University, Tacoma, Washington (Economics, Economic Education, Curriculum Development)

Guiding Questions

Each seminar participant was asked to prepare working notes addressing one or more of the following guiding questions:

1. What does the research literature on cognitive development say in general about conceptual learning of students in the 12- to 15-year-old age range?
2. What specific implications does research on cognitive development in the areas of science, mathematics, and social studies have for the development of economic education ideas and materials for students aged 12 to 15?
3. What does the research literature on political/economic socialization say in general about formation of values and attitudes in students in the 12- to 15-year-old age range?
4. What are specific implications from research on political/economic socialization with respect to development of economic education ideas and materials for students aged 12 to 15?
5. What do experience and research on economic education curriculum materials development tell us with respect to teaching

economics content and developing skills in students in the 12- to 15-year-old age range?

6. From the perspective of the economics educator, what are legitimate and important economics content and skills thought to be appropriate for students aged 12 to 15?
7. From the perspective of general social studies education, what are legitimate and important economics content and skills thought to be appropriate for students aged 12 to 15?

Much of the seminar focused on research related to cognitive development and socialization. Seminar participants generally agreed that the young adolescent is characterized by variability, in terms of both his or her ability to learn conceptually and the socialization process. The research base related to what economics the young adolescent can learn is incomplete, but there seems to be sufficient evidence that the student aged 12 to 15 can learn some economics if the material relates to the experience and imagination of the young adolescent. The seminar participants agreed that economics had the potential to excite students, but that changing the curriculum to include economic instruction could be difficult.

Following the seminar, the staff of FDLT worked to organize the seminar outcomes into a rationale but found that a number of aspects of a rationale were not addressed by participants. Thus, staff investigated such topics as societal forces that support the teaching of economics, the nature of the middle school in the United States, and the actual economic experience of the young adolescent.

Organization of the Rationale

The chapters that follow address the research literature having implications for building a rationale for economic education at the middle school level. Chapter 2, "Elements of a Rationale for Middle School Economic Education," presents some historical background on economic education in the United States, examines societal forces that may have an impact on economic education, and discusses the elements of a rationale. Chapter 3, "The Middle/Junior High School in the United States," looks at various dimensions of this level of schooling. Understanding the nature of the institution being asked

to include economics in the curriculum is necessary to building an effective rationale. Chapter 4, "The Experience of the Young Adolescent," summarizes both the cognitive development and socialization literature on 12- to 15-year-old learners. This chapter also examines schooling's potential to influence the young adolescent. Chapter 5, "Economic Experience and Understanding of the Young Adolescent," looks at the 12- to 15-year-old as a participant in the economy, both as a labor force participant and as a consumer. This chapter then summarizes the research on the young adolescent's learning of economics.

Chapter 6, "Middle School Economic Education," presents the major recommendation emerging from the seminar. This section sets forth the rationale for middle school economic education and establishes the goals for such a program. Finally, an economic education blueprint for the 12- to 15-year-old learner is offered. The final chapter presents the project's conclusions and recommendations.

Chapter 2

ELEMENTS OF A RATIONALE FOR MIDDLE SCHOOL ECONOMIC EDUCATION

> The ideas of economists and political philosophers, both when they are right and when they are wrong, are more powerful than is commonly understood. Indeed, the world is ruled by little else. Practical men, who believe themselves to be quite exempt from any intellectual influences, are usually the slaves of some defunct economist. Madmen in authority, who hear voices in the air, are distilling their frenzy from some academic scribbler of a few years back. I am sure that the power of vested interests is vastly exaggerated compared with the gradual encroachment of ideas.
>
> John Maynard Keynes in *The General Theory of Employment, Interest, and Money* (1936)

A rationale explains the "why" of something. In curriculum, a rationale sets forth reasons for the importance of teaching a body of substantive content. A curriculum rationale also needs to consider the forces in society that support the teaching of a content area. In addition, a curriculum rationale includes a consideration of the learner and the learner in a school context. Taken together, the importance of a body of content, the forces in society supporting the teaching of that content, the nature of the learner, and the learner in a school context become the elements of a curriculum rationale.

In this chapter, we examine the historical importance attached to economic education, as well as the forces supporting the teaching of economics today. In the final section we address those elements of a rationale not present when the FDLT began its work.

Historical Background

Historically, economists have been perplexed and disturbed by the perpetuation of illusions and fallacies about the economic system. Writing in 1950, Laurence E. Leamer, a noted chronicler of the state of the economy and economic literacy, wrote:

> Where are we today after sixty or more years of roundtables, of committees, of reports, of articles, and of experimentation on economic education and after approximately one hundred and sixty years of teaching our subject?. . . This writer would suggest that the basic issues remain essentially as they were in 1890. . . . (Leamer 1950, pp. 20-23).

The issues Leamer was speaking to were substantive matters related to the teaching of undergraduate collegiate economics. Yet, Leamer was also stressing the necessity of effective study and experimentation with economic education in general education.

Leamer's call for study and experimentation was not lost. It was taken up (albeit ten years later) by the National Task Force on Economic Education, a creation of the American Economic Association and the Committee for Economic Development.

The National Task Force, while making certain content recommendations, made a powerful statement of rationale for the teaching of economics in precollegiate education:

> If our citizens of tomorrow are to achieve the desired minimum economic understanding, most of them must get it in the schools. It is no good to say that they can wait until college, for less than half of them go on to college, and most of those do not study economics when they get there. . . . (Committee for Economic Development 1963, p. 4).

Since the publication of the National Task Force Report, the Joint Council on Economic Education (JCEE), founded in 1949, has had a *raison d'etre* for its activities. In reality, the 1950s saw little action in the teaching of economics in precollegiate education. Substantial federal funding and the activities of the JCEE prompted more activity related to the teaching of precollegiate economics in the 1960s. Especially notable was the development of economics curriculum materials, mostly at the senior high school level.

Unfortunately, the experimental period of the late 1960s and early 1970s had little obvious impact on the curriculum in the schools

(Hahn 1985). In 1976 the National Science Foundation supported a national conference on needed research and development in precollegiate economic education. At that conference, leaders in the field were brought together to explore potentially viable directions in economic education.

No conferee disagreed about the importance of precollegiate economic education. Among the conference recommendations were:

> Research should be conducted to find out how children learn about economic behavior.
>
> Research efforts should investigate how economic concepts can be presented to coincide with children's stages of cognitive development.
>
> All new curriculum projects should make a more realistic appraisal of children's levels of conceptualization.
>
> Research efforts should seek to determine at what age level particular economic concepts can be learned with optimal efficiency.
>
> Materials should be developed that are appropriate for 12- to 15-year-old students, since little economic education material is available for this age group.
>
> Research should be undertaken to explore what forces influence the development of children's economic images. How does social interaction with family, school, peer groups, work groups, and exposure to mass media correlate with the development of an individual's beliefs, attitudes, images, and values about the economy? (Wentworth et al. 1977).

Societal Forces and Economic Education

Although not a direct result of the NSF conference, the Joint Council on Economic Education in 1977 published a comprehensive framework for teaching economics, K-12 (JCEE 1977). The framework generated renewed interest in economic education, especially by the affiliated councils and centers in the JCEE network.

Reporting in 1985, Banaszak and Brennan found that 27 states have mandated precollegiate economics instruction of some kind and that the mandates include free enterprise education, general economic education, and/or consumer education (Banaszak and Brennan 1985). Currently, there are indications that more states are (or will be) mandating economic education. Clearly, state mandates are

another indication of an interest in and commitment to precollegiate economic education.

In addition, a number of "commission" reports will undoubtedly have a significant influence on precollegiate economic education. These reports are cited here as an additional demonstration of the potential power of societal forces in developing a rationale for economic education.

The National Commission on Excellence in Education report, *A Nation At Risk: The Imperative for Educational Reform* (1983), cited a public survey recommending that both college-bound and non-college-bound students take two years of economics or business at the secondary level. Among the recommendations of the commission with respect to social studies is a clear-cut statement regarding economic education:

> The teaching of social studies should be designed to (help students) understand the fundamentals of how our economic system works and how our political system functions (p. 26).

The commission also recommended that curriculum materials be upgraded, including materials for what are now "thin market" areas (p. 28).

The College Board report, *Academic Preparation for College: What Students Need to Know and Be Able to Do* (1983), addressed secondary education and important goals for prospective college entrants. In the field of social studies, the report stated, "If people are to perform effectively as citizens in a democratic society, they need knowledge about central institutions and values in their own society and in other major societies around the world" (p. 25). The report is more specific with respect to economics, stating that college entrants need:

> Basic factual knowledge of major political and economic institutions and their historical development.
>
> An introductory knowledge of the content and concepts of the social sciences.
>
> The basic features of major societies and cultures in the contemporary world: their geography, major economic and social structures, political systems, and religions.
>
> Familiarity with the basic method of the social sciences . . . and a basic understanding of at least one of the social sciences and of how its practitioners define and solve problems (pp. 26-27).

The report emphasized the need for curriculum planners at the high school level to work closely with their counterparts at the elementary and junior high school levels and to be thoughtful in planning learning experiences throughout the K-12 curriculum.

The Task Force on Education for Economic Growth published its report, *Action for Excellence*, in June 1983. This report set forth a series of recommendations for our nation's schools, grades K-12. In addition to recommending competencies in reading, writing, speaking, mathematics, science, and reasoning, the report listed two economic competencies:

> The ability to understand personal economics and its relationship to skills required for employment and promotability.
>
> The ability to understand our basic economic system (e.g., profits, revenues, basic law of supply and demand, etc.) (p. 50).

Throughout the report is a sense of urgency—that immediate action is crucial. Another important aspect of the report is its recognition that there are no "quick fixes," that deep and lasting changes are necessary to reach excellence in education.

Another important force for teaching economics comes from the business community at large. Business is very supportive of both the national Joint Council on Economic Education and state councils. In several states the business community has been instrumental in influencing state education mandates to teach economics in the schools. A number of businesses have supported the development of economic education materials to be used in the schools.

Missing Elements in a Rationale

Interest in and support for precollegiate economic education are currently high. Yet, some elements needed for an economic education rationale are missing. This is particularly true with regard to students in middle/junior high school and how students of all ages might best learn economics. Schug pointed this out in 1981:

> Considering the widespread application of cognitive development theory to various fields of inquiry, it is somewhat puzzling that the work of Piaget has been largely overlooked by those interested in economic education (Schug 1981).

In a later research article, Schug concluded:

> The analysis . . . suggests that reasoning about basic economic concepts fits well with the precepts of cognitive development theory. The qualities of student reasoning tended (in the study) to follow a basic pattern of becoming more abstract, other-directed, and flexible with increasing age.
>
> In view of recent interest in teaching economics in the elementary grades, this finding suggests that economic educators need to use the findings of cognitive development theorists such as Piaget to assist them in developing a curriculum which is appropriate for students at each grade level (Schug 1983).

Another missing element with respect to middle/junior high school students relates to their attitudes toward the economy and economic institutions. Banaszak (1985) pointed to this element when he stated:

> Early adolescence is, in many ways, a critical period. Young people in this age group are just emerging from the safety of their homes into the larger society, developing biologically and intellectually, becoming more adult but not yet mature. Inquiring, willing to explore, yet needing the security of a peer group, they begin to become participants in the outside world, developing attitudes and values that will remain with them for their rest of their lives.
>
> In other words, early adolescence is an important time in children's lives. And the curriculum needs to effectively address the unique characteristics of students in this age group.

Economic educators have often assumed that attitudes toward economic institutions and issues are a function of knowledge and that greater knowledge of economics will make students more sympathetic toward the American economic system and its constituent institutions. The research literature is replete with examination of various aspects of what educators have called political socialization. It has been well-documented that political attitudes of youth (e.g., partisanship, political alienation, political interest, liberal or conservative positions) are related both to subject matter studies in school and to the schooling process.

Other research indicates a positive relationship between economics instruction and student attitudes. Jackstadt and Brennen found in a study of more than 1,000 students that "it seems clear that high school students' attitudes toward the American economic system and business are affected positively by the amount of economic knowledge they possess" (Jackstadt and Brennen 1983).

Yet another group of missing elements in developing a rationale revolves around the nature of the middle school and the student in this school context. Our concern here is with the structure and organization of the middle school, the perceptions of middle school administrators and teachers, and the middle school curriculum, particularly the social studies curriculum. We know that the extensive curriculum materials development and dissemination efforts of the 1960s and 1970s, which were supported with literally millions of tax and private foundation dollars, resulted in little curricular change. One explanation given is that those proposing change did not take account of the nature of the school, perceptions of school people, and the curriculum already in place.

Summary

To summarize, it can be stated with confidence that (1) interest in the teaching of economics at the precollegiate level is widespread; (2) mandates at the state level and recommendations from prestigious commissions give a "force" to the teaching of precollegiate economics; (3) there is some useful research available to assist in developing a strategy for curriculum change at the middle school level; and (4) some research and thoughtful recommendations from economic educators and others in the field of learning indicate that economic education at the middle school level can be useful and vital for the 12- to 15-year-old learner.

Chapter 3

THE MIDDLE/JUNIOR HIGH SCHOOL IN THE UNITED STATES

Considering the context in which middle-level education occurs in the United States is a prerequisite to developing a rationale for economic education at that level. This chapter therefore summarizes the data on the structure of middle-level education, middle-level education goals and their achievement, the openness of the middle school to change, and the social studies curriculum at the middle school level.

Structural Instability

The middle grade levels have experienced extensive organizational restructuring during the past 50 years. Work by Howard and Stroumbis (1970), Brooks (1978), and Callaway (1980) documents the continuing restructuring and regrouping of grades 5-9. Unlike the lower and higher grades, the middle grade range has undergone numerous changes in organizational pattern.

A variety of factors account for this ongoing change. Studies by Lentz (1956), Alexander and Kealy (1969), Valentine and others (1981), Sinks and others (1975), Alexander (1968), and Brooks (1978) all identified reasons for the adoption of junior high school or middle school organizational patterns. The most common reasons offered were: (1) providing a program suited to the needs of the child; (2) facilitating the transition from the elementary school to the high school; and (3) adjusting to demographic pressures. Educational theory, derived in part from psychological research, and practical considerations focusing upon maximizing use of buildings have combined to encourage middle grade reorganizations.

Principals' attitudes toward optimal grade organization have changed over time, reflecting the structural instability of the middle grades. Gruhn (1967) found that 80 percent of a national sample of principals favored a 7-8-9 pattern. Valentine and others (1981), however, found a dramatic shift in favor of a 6-7-8 pattern. In their study, 54 percent of those surveyed favored a 6-7-8 pattern, compared to 18 percent in 1966. Similarly, support for a 7-8-9 pattern had plunged from 65 percent to 17 percent. Support for a 7-8 pattern had remained fairly stable, with 13 percent favoring it in 1966 and 18 percent in 1980.

Goal Instability

Not only have organizational patterns in the middle grades been unstable, but programmatic objectives have also changed. Howard and Stroumbis (1970) identified the following objectives for junior high schools of 50 years ago:

- To reduce the number of dropouts
- To offer educational and vocational guidance
- To implement economy of time
- To provide exploratory opportunities
- To recognize individual differences in the students
- To allow for the unique needs and characteristics of early adolescents
- To bridge the gap between elementary and secondary schools
- To improve discipline
- To establish an independent educational unit between the elementary and high schools.

The objectives of the junior high school have changed over time. However, the failure of the junior high school to achieve its varied theoretical goals prompted development of the middle school concept. The middle school movement proposed new goals and modifications of old ones for the middle grades. Moss (1969) identified the following criticisms of junior high schools:

1. They failed to achieve their original purpose.

2. They had evolved into a cheap imitation of the high school.
3. The ninth-grade emphasis upon college preparation was incongruent with the emphasis in the seventh and eighth grades, with which it was housed.
4. They often promoted racial segregation by maintaining neighborhood schools until the completion of the sixth grade.

In addition, Moss offered the following reasons for developing a middle school program:

1. Earlier maturation made a 6-7-8 pattern more sensible than a 7-8-9 pattern.
2. Carnegie credit requirements in the ninth grade tied it more closely to grades 10-12. Freed from Carnegie credit requirements, middle schools could engage in greater curricular experimentation to meet the needs of young adolescents.
3. Nongraded middle schools would ease the transition from elementary to secondary education.
4. Middle schools would provide improved guidance for students.

The writings of Howard and Stroumbis (1970) and McCarthy (1972) highlight the philosophical and resulting goal comparisons between the middle school and the junior high school. Among the major differences are: (1) a 6-7-8 structure vs. a 7-8-9 structure; (2) an exploratory curriculum vs. a predetermined curriculum; (3) interdisciplinary teaming vs. departmental organization; (4) individualization vs. fixed teaching practices; (5) flexibility vs. rigidity; and (6) focus on individual student needs vs. focus on subject-matter mastery. More recent work by Hunsaker and Callaway (1982) suggests that school climate (open or closed with respect to flexibility and a student needs focus) is a critical factor in the nature of educational objectives for both the middle school and the junior high school.

Comparisons of the effectiveness of junior high schools and middle schools have produced mixed results. Studies by Trauschke (1970), Smith (1975), Sardone (1976), and Brantley (1982) indicated greater academic and self-concept gains in middle schools. These studies are somewhat suspect because of their extremely limited sample sizes. Given the range of variability across schools, the results

may simply reflect characteristics of the individual schools involved, rather than being indicative of junior high schools or middle schools in general.

While some middle school/junior high school studies have used a multi-school control group approach, other researchers have opted to examine the impact of changing from a junior high school to a middle school by conducting a longitudinal study of one or more schools in transition. McGee and Kraejewski (1979) observed slight gains in achievement and attendance favoring the middle school. Baker (1972) and Beauchamp (1972) discovered improved achievement scores in both seventh and eighth grades—although not statistically better than performance in sixth grade—and improved student attitudes in all grades in the middle schools. Flynn and Stone (1975) found that students adjusted more quickly to a middle school than a junior high school. Rankin (1969) noted that students in grades 6-10 in a middle school pattern perceived fewer problems in a middle school than in a junior high school.

Need for Quality Middle-Level Programs

After almost 50 years of curriculum and organizational reform targeted at the middle grades, evidence continues to mount that educational programs in these grades are not achieving their objectives. Lounsbury and Marani (1964) found that junior high schools were failing to provide educational opportunities that matched the interests of students. They reported, "The distinctive qualities of program and attitude seemingly to be provided for the demands of young adolescents were only faintly visible." Rasmusson (1962) concluded that the junior high school was the "weakest rung in the educational ladder." Austin (1967) found significant discrepancies between the theoretical attributes of junior high schools and their operational practice. Hays (1966) found that there was "room for improvement in all areas" of the educational programs of junior high schools in Pennsylvania. Henderson (1962) found that junior high schools in Arizona failed to meet standards identified by experts. Lavenburg (1963) discovered that junior high schools did little to facilitate the transition from elementary to senior high school.

Alexander (1968), Gross (1972), Brooks (1978), Riegle (1971), Raymer (1974), Butera (1972), Kopko (1976), Good (1972), Kramer

(1974), Billings (1973), and Daniel (1973) all criticized middle schools for their failure to implement optimal practices. In the area of social studies, Patrick (1982) offered a powerful criticism of middle-level education when he reported:

> In summary, junior high school students appear to be ignorant of many basic facts and concepts in civics, history, geography, and economics. This ignorance may, in some cases, be due to lack of exposure to certain subject matter. It may, in other cases, result from poor teaching, poor instructional materials, or inadequate learning environments.

Openness to Change

There is some evidence that middle and junior high school teachers are at least slightly open to innovation, with middle school teachers being more receptive. Evans (1970) found more support for innovative practices among middle school teachers than among junior high school teachers. Unruh (1975) concluded that middle schools tended to be more innovative than junior high schools, a finding corroborated by Cave (1975). Allen and Splittgerber's (1980) findings indicate that teachers support middle school instructors' assuming a variety of teaching roles and using a range of instructional strategies. This finding suggests—albeit obliquely—that middle school faculty may be somewhat receptive to innovation.

Teachers at the middle level who participated in the Foundation for Teaching Economics student attitude study were asked to rank economics with respect to other subject areas. Given seven other subject areas, the teachers never ranked economics as less important (than the other subjects). They indicated that economics was equally as important as civics, American government, American history, consumer education, and business education. They indicated that economics was more important than world history, ethnic studies, and psychology (Ingels and O'Brien 1985, p. 41). While there were just 16 teachers participating in the study, this is at least a slight indication of some openness to consideration of economics in the middle/junior high school curriculum.

The Middle-Level Social Studies Curriculum

Although there is no nationally imposed curriculum in social studies, research by Wiley (1977), Stake and Easley (1978), Weiss

(1978), and Fontana (1980) suggests that a dominant pattern exists. The pattern shown in Table 3-1 was identified by Project SPAN.

TABLE 3-1

Predominant Social Studies Curriculum Pattern

Grade Level	Subject/Topic
K	Self, home, family, school
1	Families
2	Neighborhoods
3	Communities
4	State history/U.S. geographic regions/ World regions
5	U.S. history
6	World cultures/Eastern hemisphere/ Western hemisphere
7	World cultures/World history/World geography/State history
8	U.S. history
9	World cultures/World history/Civics/ Government/State history
10	World cultures/World history
11	U.S. history
12	American Government/electives including economics, psychology, sociology/some Problems of Democracy

(Lengel and Superka 1982, pp. 83, 89)

An examination of elementary social studies programs available from major publishers indicates that most textbook series are organized around an expanding horizons pattern. Sixth and seventh grades depart from the pattern of having a single text (and content area) for each grade level. Several publishers have responded to the diversity of the social studies curriculum at these two levels by offering two—or even three—texts. For example, a series might include a world history text, a western hemisphere text, and an eastern hemisphere text, all of which could be used at either sixth or seventh grade. U.S. history at eighth grade (and again at eleventh grade) is the most pervasive course in the country.

Sutton (1976) found that 44 percent of the states require the study of world cultures in high school. Henning and others (1979)

found that 33 states require study of state and national history. Weiss's data (1978) indicated that where state studies were required after grade 4, the requirements were most likely to focus on the middle grades.

The discussion above suggests that curriculum rigidity is almost complete for grades K-5 and 10-12. While a definite national pattern exists for grades 6-9, it does not appear to be as closed as the pattern for the previous or subsequent grade levels. Grade 8—with U.S. history—is firmly established. Grades 6, 7, and 9—with some combination of "world" study and attention to civics/government—may be the most fertile ground for social studies curriculum innovation, provided the innovator can make a sound case for change at these levels.

Summary

The organization of middle-level education in the United States has been characterized by varying grade patterns. Currently, two organizational patterns dominate—grouping of grade levels 6, 7, and 8 in middle schools and grouping of levels 7, 8, and 9 in junior high schools. Evidence indicates that the 6-7-8 pattern is currently favored by school administrators.

Program goals at the middle level have also fluctuated, although some elements have remained consistent. Historically, the middle/junior high school was thought to be the time in the child's schooling when the transition from childhood to adulthood (adolescence) could be assisted by thoughtful program development. A major problem in providing this assistance has been the struggle between a content/subject-centered approach to education (embodied in the junior high school) and a child-centered approach (represented in the middle school). This struggle continues. There may be some pressures for reconsideration of a child-centered approach, with attention to personal interests of students, basic skill development, and personal and social development opportunities. The social studies curriculum at the middle level, while reflecting a dominant pattern nationwide, is less "set" than the curriculum in grades K-5 and 10-12. The fact that the middle school social studies curriculum is less set does not imply that curriculum change at this level will be easy. It will behoove innovators to examine successful change strategies before attempting to introduce economic education in the middle school.

Chapter 4

THE EXPERIENCE OF THE YOUNG ADOLESCENT

This chapter reviews what is known about the young adolescent as individual in transition, as thinker, and as learner in school settings. This discussion is general, reserving issues of the young adolescent as they relate to economic phenomena for the following chapter.

The first section of this chapter looks at the personal and social experience of the young adolescent, while the second focuses on cognitive development. In the third section, we examine other perspectives on teaching and learning, acknowledging the work of the Soviet learning theorist, L.S. Vygotsky, as well as research on problem-solving and decision-making.

When attempting to develop curriculum, reviewing what has been tried before and to what effect is always useful. This kind of analysis provides a frame of reference and assists the curriculum developer in formulating a realistic set of guidelines and expectations. The final section of the chapter therefore summarizes a wide range of research that has focused on what have typically been referred to as affective goals.

The Personal and Social Experience of the Young Adolescent

Young adolescence is a period of rapid growth, a time of dramatic physical, emotional, psychological, and social change. Today puberty begins earlier than it did 100 years ago, with girls enter-

ing this growth period one to two years sooner than boys. Not only are there variations across the sexes regarding age at entry into adolescence, but there are also wide differences within sexes. Tanner (1971) and Reynolds and Wines (1951, 1948) contend that these variations result in differences of up to six years in the onset of adolescent physical development.

Rapid changes and the differences in age at onset of puberty create unique needs for the adolescent. Young adolescents must contend with biological needs related to their physical maturation. They must address intellectual and emotional needs relating to both brain growth and the development of self-identity differentiated from their parents. They also must grapple with social and emotional needs related to the assumption of adult roles.

Mead (1965) observed the following with regard to young adolescents:

> One of the striking features of the last two decades has been the steady downward spread in age level of dating; going steady; pairing-off (rather than one-sex friendships); and an emphasis on vocational choices, criminal behavior, competitive athletics, religious affiliation, and permission to spend money on an increasingly lavish scale.

Coleman (1965) also reported a trend toward students' exhibiting behaviors previously more prevalent among older youth. Teagarden (1976) found that on a test of social maturity, ninth-grade students responded in a manner that indicated greater maturity and greater social sophistication than adolescents of the past. Ninth-grade students seemed comparable to eleventh- and twelfth-graders of the 1930s. Havighurst (1965) found that "the adolescent of today is more precocious and more complex." This more sophisticated behavior leads adults to expect mature responses from adolescents. These expectations place further demands on young adolescents. They confront situations in which they need sophisticated emotional, social, and intellectual skills and knowledge. They face choices that would have been considered beyond their years a few decades ago.

While learning how to cope with increasingly sophisticated social situations, young adolescents must also develop socially acceptable means of expressing their independence. Simmonds and

others (1973) reported that one of the most salient characteristics of young adolescence is the quest for self-identity and independence. An integral aspect of this process is the relative decline in importance of adults as a reference group. Simultaneously, peers assume a greater importance. Young adolescents are learning new ways of relating to people, new social behaviors, and new norms associated with new reference groups. They need opportunities to interact with others, try new behaviors, test new self-concepts, and analyze their new behaviors and attitudes.

As they grow out of childhood toward adulthood, adolescents need information about and opportunities to begin to move toward adult roles. The Panel on Youth of the President's Science Advisory Committee (1974) observed:

> In our society economic self-sufficiency is not simply a *sine qua non* of adult status. For most males occupation also sets most aspects of life style for self, spouse, and offspring—characteristics of spouse, marriage and family patterns, income and what it buys, status in the community, satisfaction of personal drives and needs, recreational outlets, conversation style, dress, place of residence, associations with friends, relatives and acquaintances and their continuity or discontinuity, political and social attitudes, goals, and ideas. Yet by 14, when they are only beginning to form and understand the "self" they are projecting into the future, our young must start to make educational choices that determine occupation and its ramifications. To compound the dilemma they also have little information about the current world of work, even less about future changes, and only haphazard ways of acquiring it.

These findings indicate that young adolescents should have an opportunity to collect information about adult roles in the workplace, job conditions, and other information necessary for making informed choices related to economic matters.

Not only do young adolescents face a myriad of social needs as they move toward the assumption of adult social roles, they also face extensive emotional demands. The quest for independence and self-identity that characterizes the adolescent years poses unique emotional needs. Adolescents, according to Schmuck (1965), are searching for a sense of competence, self-efficacy, and intimacy that symbolizes the achievement of integration of the self with others.

One of the most commonly held views in the behavioral sciences has been that the quest for independence and self-identity results in disturbances in a child's self-image. Hall (1904), Simmonds and others 1973), and Evans (1973, 1969) have argued that the young adolescent years are ones of decreased self-esteem and "identity crisis." More recent research by Dusek and Flaherty (1981), McCarthy and Hoge (1982), Blyth, Simmonds, and Carlton-Ford (1983), Blyth and Traeger (1983), and Blyth, Simmonds, and Bush (1978) suggests that changes in self-image may be more continuous and that self-esteem of middle-level students may not suffer as a function of age. Given the ambiguity in this research area, it seems advisable to provide programs that offer students opportunities for mastery, for successful social interaction, and for demonstrating competence.

Cognitive Development and the Young Adolescent

More than 90 years ago, John Dewey argued that learners' developmental characteristics should be considered in setting educational goals. In 1895 Dewey and McLellan stated that "Education is the work of supplying the conditions which will enable the psychical functions, as they successively arise, to mature and pass into higher functions in the freest and fullest manner" (Dewey and McLellan 1964, p. 207). Since that time, educators have discussed, analyzed, and critiqued the work of developmental psychologists with a view toward applying developmental theory and research to classroom practice. However, even in the 1980s, only occasionally does one find social studies curricula based on developmental insights.

The most complete and influential statement of developmental theory is present in the work of Jean Piaget. At the core of Piaget's cognitive-developmental theory is the doctrine of cognitive stages. According to Piaget, stages have the following characteristics:

1. Stages imply distinct, qualitative differences in children's modes of thinking or of solving the same problem.

2. These different modes of thought form an invariant sequence, order, or succession. While cultural factors may speed up, slow

down, enhance, or hinder development, they do not change its sequence.

3. Each sequential mode of thought forms a "structural whole." A given stage-response on a task does not represent simply a specific response determined by knowledge and familiarity with that task or tasks similar to it; rather, it represents an underlying system of organizing thought.

4. Cognitive stages are hierarchial integrations. Stages form an order of increasingly differentiated and integrated *structures* to fulfill a common function (Piaget 1960, pp. 13-15).

Underlying the stage theory of Piaget is an interactionist theory of learning: knowledge is constructed by the individual through reorganization of psychological structures resulting from individual environment interactions. That is, the acquisition of knowledge is not seen as passive, but rather as the result of active construction based on the individual's experiencing significant interactions within the social environment. Curriculum developers must realize that students' understanding of experience—both academic and social—is not passively absorbed. Rather, it is constructed on the individual's current cognitive structures. If the input cannot be fit (assimilated) into existing structures, the structures themselves undergo change (accommodation). Development consists of the progressive evolution of these cognitive structures into more complex and differentiated forms.

The rate of development is limited. Prerequisite levels of biological maturation must be realized before the capacity for subsequent cognitive development can emerge. Cognitive development also depends on biological maturation. Recent research on brain growth has suggested an interesting parallel in this regard: one of the major periods of brain growth (ages 10 to 12) corresponds with the onset of the capability for formal operational thought (Epstein 1978).

For the purposes of this rationale, the crucial developmental periods are concrete operational and formal operational stages. Most young adolescents interpret their world from the structures of the cognitive operational stage. Bybee and Sund (1982, p. 113) sum-

marized the concrete operational period on nine content variables as shown in Table 4-1.

TABLE 4-1

The Student's Developing Understanding of the World: Concrete Operational Period

	Concrete Operational Period	
Content	Beginning Characteristics	End Characteristics
Action	Prelogical thought—Can reason in one direction	Logical reversible thinking but reasoning is related to concrete situations
Objects	Conservation of identity	Conservation of quantity seriation, classification, and number
Space	Broadens concept of space	Understands relations within objects—elementary geometry
Time	Aware of past, present, and future	Coordination of temporal order and duration
Causality	Animistic	Understands cause/effect in concrete problems
Play	Representative play	Practical play
Imitation	Representative imitation	Practical imitation
Self	Egocentrism	Reduced egocentrism
Language	Egocentric language	Practical language

The characteristics of the concrete operational learner can be summarized as follows:

1. The learner can understand classes of concepts within a hierarchy (e.g., understanding part-whole relationships).
2. The learner can order information based on size (e.g., recognizing properties of numbers and gleaning meaning related to size of measurement).
3. The learner can comprehend reciprocal relationships (e.g., reasoning logically about the symmetry of relationships in a same situation, event).

4. The learner can assess two viewpoints at the same time (e.g., reversing thinking to judge changes on issues).
5. The learner can use logical patterns of reasoning on concrete problems (e.g., taking a "given" and working through steps to a logical conclusion).

The formal operational learner exhibits a number of characteristics that logically extend beyond the level of concrete operations. The formal operational learner can conceptualize rather than focus on description of images based in experience. That is, the learner is able to free thought from image. In the early stages of formal operational thinking, the learner is able to utilize some, but not all, alternative conceptual systems to analyze situations. In the later stages of formal operations, the learner can demonstrate use of alternatives in almost any situation. The early formal operational thinker will still confuse the hypothetical with the real; in the later stages, the distinction is clear. The formal operational learner realizes that more than one set of rules can apply to a situation and understands the necessity to modify rules in specific circumstances. The formal operational learner is idealistic, recognizing that the real world often falls short of the ideal.

There is no question that Piaget's contributions to research on cognitive development have been substantial. We need to remember, however, that this research examined logical patterns of reasoning. Such other cognitive processes as creativity, problem solving, affective maturation, and right/left brain processes were not studied. Educators would do well to keep cognitive development in perspective, taking account of such other factors related to young learners as personal, social, motivational, and cultural (especially school culture).

Brown (1982) pointed out that a developmental perspective centers more on the learner than on specific content or subjects in the curriculum. Thus, one needs to be careful in how a body of content is conceived and the degree to which that content is consistent with the goals of a developmental approach. Brown also pointed out that, "Although Piaget sets approximate age ranges for the stages—for example, beyond 12 for formal operations, (other research) revealed that most of the pupils below the chronological age

of 16.2 were reasoning at the concrete level when tested on the use of historical data" (p. 32).

It is important to recognize the variability—both within and between the sexes—in physical, emotional, and psychological development of the young adolescent. This developmental variability demands careful diagnosis. In developing curriculum, recognizing the variability within a certain age range and between sexes is crucial. It is necessary to provide frequent experiences requiring students to maximize their own mental capacity. Also helpful is structuring learning experiences that challenge, but do not overwhelm, the existing cognitive structures.

Other Perspectives on Teaching and Learning

Another Developmental Perspective

Developmental considerations have not played a major role in sequencing knowledge or skills in social studies curriculum development. A common developmental practice, at least in theory, has been to "match" instruction with the child's developmental level, as measured by a child's performance on mental functions tests. These tests are able to describe a child's "actual developmental level, or the level that has been established as a result of certain already completed developmental cycles" (Vygotsky 1978, p. 85). Vygotsky felt that, at least in developing concepts related to society, considering a child's "level of potential [or proximal] development" was also important (Vygotsky 1978, p. 86). The level of potential development is an indication of what kinds of thinking tasks children can perform when they are given some help or assistance.

Vygotsky found that young children at the same developmental level differed in their developmental dynamics, their ability to learn from instruction. He referred to the difference between a child's actual developmental level and the level of potential development (as measured by problem-solving under adult or peer collaboration) as the "zone of proximal development" (1978, p. 86). Being aware of these two types of developmental levels should help focus attention on those psychological functions that are in the process of maturing. Acknowledging potential cognitive development in children and applying the concept of the zone of proximal development may

provide useful constructs for curriculum and instruction. The full application of these ideas has yet to be explored in the development of social studies (e.g., economics) curriculum.

As with other literature on cognitive development, the work of Vygotsky suggests that educators and curriculum developers become aware of a student's potential to learn. This view of potential implies that developers should provide challenging experiences that initially may be somewhat beyond a student's ability to deal with fully.

Problem-Solving and Decision-Making

In order for students to begin the processes of solving problems and making decisions, they need information. In most subject areas, including economics, the information is organized into concepts. Concepts are thought to be fundamental to problem-solving and decision-making processes. Younger children often experience trial and error in organizing their observations of the world. They often make random groupings. As children mature and are formally instructed in learning concepts, they go through a process of reorganizing information about the social world. There is continuous building and rebuilding of systems of patterns and ideas having some sense of organization. As students reach more formal stages in learning concepts, they develop relational and causal patterns and can arrange their knowledge into hierarchical groupings. It is at this more formal level of concept learning that knowledge can be most easily applied to problem-solving situations (Armento 1985, p. 9).

The work of Voss and others (1983, pp. 171-173) should be acknowledged. These researchers have developed a problem-solving/reasoning model that reveals differences in the way experts and novices represent (define) problems, offer solutions, and provide justification. Experts give considerable attention to carefully and thoroughly defining problems, while novices give problem definition little attention, responding to surface features of the problem and jumping to relatively simple solutions. Experts know more than novices, and their knowledge is hierarchically patterned. That is, it is organized in such a way that specific facts are linked to categories of concepts; these concepts, in turn, are integrated into principles or generalizations and networks or theories.

Development of problem-solving expertise is not merely information acquisition. It is the construction, expansion, and refinement of conceptual networks that interrelate factual information, concepts, principles, and procedures (Chi, Glasser, and Rees 1981; Chi and Glasser 1983; Larkin, Heller, and Greeno 1980).

Cornbleth (1985) has identified a number of implications from the research on problem-solving and decision-making. These include:

1. Information should serve as working knowledge that is continually (re)organized and utilized.
2. Skills should not be taught in isolation from one another or from the subject matter content and problems with which they are to be used.
3. Concept instruction should not end with evidence of students' comprehension of a single concept or concept pair. Rather, instruction, including practice with informative feedback, should extend to relationships among several concepts and the use of these conceptual networks in interpreting new situations, problem-solving, and critical thinking.
4. Lists of terms to define should be a rare rather than a commonplace experience in social studies classrooms. Students might be asked and helped to interrelate, through mapping or diagraming, the relationships among the terms, rather than copy, memorize, and reproduce definitions.

Cornbleth also does an excellent job of summarizing the research on knowledge structures and their relationship to critical thinking:

> It is clear that organized knowledge is crucial to critical thinking. The cognitive research on knowledge structures, like the problem-solving research, usually involves expert-novice comparisons and is more descriptive of desired states than of how functional knowledge structures are created or enhanced via instruction. The value of this research to social studies education generally and critical thinking in particular is largely conceptual and heuristic. It suggests a reorientation of our ways of thinking about, studying, and teaching for knowledge acquisition. What matters most is not simply how much we know, but what we know and how we organize our knowledge (Cornbleth 1985, p. 35).

The Potential for School Curriculum to Influence Development in Adolescence

The research and writing concerning development in young adolescence generally does not include analysis of the influence of schooling. Writers and scholars typically focus on such factors as biological, psychodynamic, and cognitive development, peer and family relations, and social and historical period effects. While there can be little doubt concerning the importance of these factors in shaping the character of the young adolescent, it is also the case that schooling is a central and important fact of life for youth in this period of development; for it is in and around schools that youth live out large segments of their adolescence. Schools are also the place where the adult community entrusts school boards and teachers with the responsibility to provide schooling experiences that positively influence adolescent development.

Almost all perspectives on adolescence have noted that one of its most significant characteristics is the onset of new ways of thinking, feeling, and acting brought on by a new cognitive competence—the ability to reflect upon one's social experience. The motive for this re-examination of one's knowledge, and hence the emergence of a new identity, comes from experience and conflict within one's social life. Since a portion of the adolescent's social experience takes place within curricular settings, it is important to examine the available research on curricula that teachers and researchers have designed to positively influence the social development of youth.

The research reviewed here is not to be taken to be a complete description of the impact of schooling on adolescent development. Much more than curriculum goes on in schools. Coleman's (1961) description of the adolescent society and Cusik's (1973) and Willis's (1977) ethnographic descriptions of adolescent life in schools indicate that simple linear descriptions of the effect of curriculum are overly simplistic views of the full influence of schooling. Nevertheless, it is useful for educators to examine the effects of curriculum, in that it is the dominant focus of schooling activities for educational professionals. Evidence regarding the influence of curriculum on young adolescents can also contribute to a fuller understanding of the dynamics of adolescent development.

In this section the focus will be on socio-moral development.

By this we refer to those ways of thinking, feeling, and acting that are directly concerned with one's interactions with others. It has long been a tenet of American education that education involves more than academic and intellectual matters (e.g., the concern for citizenship education). Over the past 20 years, concerns for humanistic education and moral/value education have also stressed student social development.

The discussion below is limited to those areas in which there is an emerging or existing body of research. Areas in which there are only a few or single studies are not included. Due to length restrictions, we rely heavily on existing reviews of research. Three curricular approaches that have extensive research bases and are designed to influence the social development of young adolescents were identified: values clarification, moral development, and cooperative learning. Each is discussed, as is research on the effect of school climate.

Values Clarification

The values clarification (VC) approach has enjoyed great popularity among teachers at all grade levels in public schools. The research on the curricular effectiveness of the approach now spans more than 25 years. Unfortunately, of the more than 100 research studies, only a handful have been published; the remainder are unpublished doctoral dissertations. Because of the inaccessibility and expense of procuring the actual dissertations, the research on values clarification has remained largely hidden from educators. Recent reviews of the literature, however, have provided a perspective on the effectiveness of the approach (Lockwood 1978; Leming 1981; Leming 1985). Of the extant research on values clarification, 25 studies have involved interventions with young adolescents. The discussion below is based on the above-mentioned reviews. The reader is referred to these reviews for a more detailed discussion of the 25 studies.

According to the proponents of values clarification (Raths, Harmin, and Simon 1978), a major cause of negative personal and social behavior in youth is uncertainty over values. It is argued that through a process of values clarification, youth will develop a greater sense of purpose in their lives, and their behavior will become more socially acceptable and their personal lives more positive. This claim is not

well supported by the research. In the 25 research studies mentioned above, four dependent variables were assessed with sufficient frequency to warrant generalization. Self-concept was the most frequently studied variable. Self-concept was enhanced as a result of values clarification in only five of 14 studies. In two cases, students who had experienced values clarification manifested lower self-concept than control students. In seven of the studies, no difference was found between VC students and control students.

A second major area of inquiry centered on whether VC activities result in a change in student values. In only three of 11 cases was a shift in student values detected. Central to the VC rationale is the expectation that student behavior will become more positive and socially responsible. In the eight studies that included data on student behavior, only two found the expected change. A final area of interest to VC research has centered on the relationship between values clarity and academic achievement. In only one of six studies was it found that student academic achievement increased as a result of VC activities.

Overall, the research on values clarification is not impressive, a somewhat surprising fact in light of the generally enthusiastic support the approach garners among teachers and students. One possible explanation may be that the research does not fairly assess the positive results as they appear to students and teachers. Also there can be little doubt that the VC research program is a flawed one. The interventions are usually eclectic and of short duration. The instruments used to measure dependent variables are frequently unreliable or inappropriate, and the studies generally are not carefully designed.

The observed pattern of findings discussed above, however, is consistent over the 100-plus studies and persists regardless of the quality of the research design. These findings suggest that teachers ought to examine their use of VC activities carefully. If the results of VC in the classroom are as unimpressive as suggested, it would appear that there is no evidence that values clarification has any positive influence on adolescent development.

Moral Discussion

The moral dilemma discussion approach (MD) of Lawrence Kohlberg holds that if students are exposed to cognitive moral

conflict through discussion of moral dilemmas and concomitantly exposed to the next highest stage of moral reasoning, then development to the next highest stage can be facilitated. This approach to moral education has been extensively researched, and a number of reviews of that research have documented the overall efficacy of the methodology (Enright et al. 1983; Lawrence 1980; Leming 1981; Leming 1985; and Lockwood 1978).

The typical moral dilemma discussion intervention study involves interviewing the individual subjects on a series of moral dilemmas and then scoring the transcriptions of the interviews for stage of moral reasoning. Next follows a series of class discussions of moral dilemmas, at least one per week, for at least one semester. Interventions of shorter duration do not consistently show the cognitive growth of longer interventions. The most consistent results have been obtained in year-long interventions. This is probably due to the fact that cognitive reorganization is a complex psychological phenomenon and cannot be rushed. A typical study concludes with reinterviews of the students on an alternative set of moral dilemmas and calculation of the stage score of the students on the second interviews. The mean stage growth of the class is then compared with that of a control group (no discussion of moral dilemmas). It should be noted that in contrast to values clarification research, the MD studies involve a single, fairly uniform intervention and dependent variable.

Eighteen studies were identified that utilized the moral dilemma discussion approach with young adolescents. In over 70 percent of the studies, the MD class exceeded the control group in moral stage upward change. The extent of stage change varied from study to study, but typically involved upward movement of one-sixth to one-half of a stage. Most young adolescents are at stage two or three. The upward movement as a result of MD interventions then represented a shift away from defining moral questions in terms of one's self-interest and toward a more social and conventional perspective, in which one begins to use social norms to define one's moral responsibilities.

The MD research supports the claims of the approach's proponents; however, one can reasonably question the significance of such a finding. That is, is a mean change of one-third stage over a year among a class of young adolescents of educational significance? There is little evidence that conclusively ties stage of moral

reasoning to social behavior at the stage two/stage three level. Kohlberg and Candee (1984) have argued that thinking and behavior are related, but the evidence is preliminary. The presumed relationship is based primarily on findings with adults. The arguments as to why higher stages are better stages are complex, lengthy, and beyond the scope of this review; however, if use of the MD approach is to be seen as an important goal for teachers of young adolescents, a long—rather than short—developmental perspective must be adopted. Teachers must realize that what is accomplished in their classroom is only a small step on the long, but important, pathway to adult moral maturity.

Cooperative Learning

Cooperative learning is a recent approach to instruction that attempts to redress what is seen as an over-emphasis on competitive and individualistic structures in schooling. Although the rubric of cooperative learning covers a wide range of activities, its basic tenet is use of learning experiences in which small groups of students share responsibility for learning of other members of the group. Typically these small groups of four to five students are comprised in such a way as to include a wide range of academic, social, and racial backgrounds. Students generally are rewarded for the success of the group as a whole. These rewards may be in the form of grades or other kinds of recognition. Thus, cooperation among members of the group to achieve individual and group goals (mastery of content) replaces the individualistic, competitive learning structure of the traditional classroom.

The research on cooperative learning is extensive and has been summarized in reviews and meta-analyses by Madden and Slavin (1983b), Slavin (1980, 1983), Johnson and others (1981), and Sharan (1980). Although the research on cooperative learning has been conducted among students at all grade levels, a majority of those studies have involved young adolescents.

The extensive field experimental research on cooperative techniques in the classroom can be summarized as follows: when compared with individualistic and competitive methods, cooperative learning methods generally produce greater academic learning; better intergroup relations among black, white, and Hispanic students; enhanced self-esteem; improved relationships between mainstreamed

academically disabled students and normal-progress students; general mutual concern and interpersonal trust among students; and increased propensity for prosocial behavior.

In a meta-analysis of the research literature, Johnson and others (1981) reviewed 122 studies on cooperative learning. Their analysis supported the overwhelming superiority of cooperation in promoting student achievement and productivity. Although this conclusion has not gone unchallenged (Slavin 1983; Sharan 1980), the weight of the evidence supports the relationship.

The research on the effects of cooperative learning in improving racial attitudes has involved placing students in heterogeneous groups where the groups complete an academic task, making sure that all members of the group have mastered the material. Improvement in race relations has usually been measured in one of two ways: sociometric scores of cross-social friendship and cross-ethnic reciprocal friendship choices. Studies designed to increase the acceptance of mainstreamed academically disabled students (Madden and Slavin 1983a; Madden and Slavin 1983b; Johnson and Johnson 1981) demonstrated a similar facilitative effect on student acceptance.

Research on two additional dependent variables suggests that cooperative learning has the potential to become an important tool in social and moral education. Mutual concern among students is measured in many of the cooperative learning studies. Mutual concern is assessed by obtaining from students ratings of peers and perceptions of being liked by peers. The consistent finding, regardless of the model of cooperative learning utilized, has been highly positive with regard to the promotion of interpersonal attraction, trust, and sense of being accepted by teachers and peers. In a study by Cooper and others (1980), students from an inner city junior high school were randomly assigned to one of three conditions: cooperative (working as a group and being rewarded as a group), competitive (striving to be the best in the group), and individualistic (working on one's own and not interacting with other students). When students who were initially prejudiced against one another were present in the same learning condition, the cooperative experience was found to promote more interpersonal attraction than did the other conditions.

Research with selected cooperative learning methods indicates that cooperative learning can also be a significant tool for developing

prosocial or altruistic behavior. For example, Johnson and others (1976) found that pupils in cooperative small-group learning without inter-group competition or reward interdependence responded more altruistically than pupils in an individual learning condition. Hertz-Lazarowitz, Sharan, and Steinberg (1980) found similar results with several hundred elementary-age students. Finally, Ryan and Wheeler (1977) found that students who had studied cooperatively made more cooperative and helpful decisions in a subsequent simulation game than did students who had studied competitively.

The research on cooperative learning suggests that the present competitive and individualistic structure of schools is not without a cost. While there can be little question concerning the presence of individualistic and competitive structures within adult society, there are also significant instances in which cooperation is related to personal satisfaction and success. To the extent that young adolescents are denied experiences in working cooperatively with peers, important opportunities for social development are missed.

Classroom/School Climate

It has long been recognized that more is taught and learned in schools than what exists in teacher lesson plans, textbooks, and tests. The phrase "hidden curriculum" is frequently used to summarize the variety of school/classroom factors that influence children but are not a part of regular curricula. The majority of these hidden or latent factors in school life center around issues of authority and control. It is a general fact of life for adolescents, and one of the persisting paradoxes of American education, that life in schools is decidedly undemocratic. In this section we review the research on the influence of democratic and undemocratic practices on early adolescents in schools.

The research on schools in which students are not allowed to experience meaningful participation in classroom or school life suggests that the resultant student attitudes, values, and behavior are undesirable. Dillon and Grout (1976) found that students become alienated when they are denied meaningful participation in school and classroom life. In their study, seven Midwestern schools were ranked according to the degree of pupil-initiated purposeful learning activities. The attitudes of fifth-, sixth-, seventh-, and eighth-graders toward school and teachers were then assessed. It was found

that alienation was highest when others set goals for students.

The above finding is consistent with a number of studies conducted at the high school level. Rafahedes and Hoy (1971) reported that in schools in which teacher attitudes and behavior were classified as "custodial," students were more likely to express feelings of alienation than students in schools classified as "non-custodial." The Safe Schools Study detected a clear relationship between characteristics of school climate and organization and rates of school violence and crime (Boesel 1978). Students' perceptions that they had no control over their lives in schools were associated with higher rates of crime.

Metzger and Barr (1978) found in comparing two school environments, one comprehensive and characterized by little perceived student involvement and the other an alternative school characterized by a higher sense of participation in governing procedures, that students in the less democratic setting demonstrated significantly lower scores on a measure of political interest, integration, trust, and political confidence. Ehman and Gillespie (1975) found that in schools characterized by a high degree of teacher and administrative direction, students have more negative attitudes toward politics and are less integrated, trusting, and confident than other students.

There is also evidence that suggests that participation in democratic classrooms can have a facilitative effect on moral development. Studies by Stuhr and Rundle (1980), McCann and Bell (1975), Kubelick (1977), and Crockenberg and Nicoloyev (1979) all suggest that democratic experiences will stimulate moral reasoning in young adolescents.

Power (1981) has analyzed the influence of democratic experiences on youth from a more sociological perspective: the evolution of collective norms. In his descriptive studies of a Kohlbergian just community program, he has described how democratic schools evolve from a stage of proposal of norms, to expectation of compliance, to enforcement of the norm, and finally to compliance. In classrooms and schools practicing democracy, norms have evolved in such areas as respect for others, stealing, drug usage, and attendance. This description suggests that not only does democratic schooling have a potential influence on student attitudes and moral reasoning, but also may result in students' developing democratically agreed-upon norms that they willfully obey.

Summary

The young adolescent is clearly a seeker of "self." As such, the young adolescent needs to be given educational opportunities that assist in the identity search. Many aspects of the study of economics can help 12- to 15-year-old learners form their own identities, especially when the young adolescent is allowed to examine the various adult roles in economic matters. Also important is providing young adolescents with "safe" opportunities for interacting in successful ways socially in order to develop their own solid emotional foundations.

While many in the 12- to 15-year-old age group may be operating at the concrete operations level of cognitive development, others may be capable of more formal thinking. Being aware of the young adolescent's use of other cognitive processes such as creativity and problem-solving is also important. Just as curriculum developers should be mindful of dimensions of variability in the young adolescent, so should they provide learning experiences that challenge, but do not overwhelm. These learning experiences might well include tasks that are not initially fully comprehensible to the student.

Students need opportunities to "play" with information. They need to be given more limited information than they may be given presently and allowed to organize and reorganize it. As the student matures and becomes a more formal thinker, opportunities that enable the student to link pieces of knowledge and apply the knowledge to problems should be presented.

Social development in young adolescents is inevitable. The question posed to those charged with the education of youth is whether schools and classrooms will be constituted in such a way as to positively enhance that development. The literature suggests several guidelines that may inform practice. Research suggests that school environments characterized as undemocratic and authoritarian may result in feelings of alienation and powerlessness, while environments that are democratic and open may positively influence youth's political attitudes, feelings of social integration, and respect for agreed-upon norms.

In classrooms in which controversy and discussion of moral issues never occur, it is unlikely that moral development will occur. On the other hand, where students regularly discuss moral dilemmas,

development in moral reasoning may be facilitated. Finally, in classrooms where students have the opportunity to engage in cooperative learning activities, a wide range of desirable social attitudes and behaviors may result. In competitive, individualistic classrooms, these outcomes are unlikely to occur.

The research clearly suggests that opportunity exists for schools to positively influence the social development of young adolescents. It is also suggested, however, that schooling as usual will result in missed developmental opportunities for youth.

Chapter 5

ECONOMIC EXPERIENCE AND UNDERSTANDING OF THE YOUNG ADOLESCENT

In this section we review the data on young adolescents' entry into the economic world, both as consumers and workers. We also examine the development of young adolescents' reasoning about economic phenomena. Understanding the nature of these experiences and how students make sense of this expanding economic world is critical information for those interested in economic education for the middle-level learner.

Labor Force Participation of Middle School Students

Young adolescents are entering the labor force in higher percentages with each passing decade. Greenberger and Steinberg (1982) reported that "since 1940, the proportion of 16-year-old males who work while attending school has risen by 500 percent; for females of this age, the proportion has risen by a factor of 11." Comparable increases in employment rates have occurred for 14- and 15-year-olds. Approximately 30 percent of all ninth- and tenth-graders will be employed during the school year, and more than 80 percent of all students will have been employed before graduating. Lewis-Epstein (1981) reported that hours worked increase with age. As Table 5-1 demonstrates, employment of 15- and 16-year-old females is approaching that of males. According to the table, employment for 14- and 15-year-olds varies significantly by sex and race. In 1979, unemployment among black females was almost 50 percent, while white females in the same age group had an unemployment rate of about 11 percent.

TABLE 5-1

Employment of 15- and 16-Year Olds

	Total Percentage	Percent Boys	Percent Girls
1954	18.1	24.7	11.3
1959	18.7	24.3	12.9
1969	18.5	22.0	14.9
1979	20.7	22.2	18.7

(Westcott 1981, p. 66)

Table 5-2 demonstrates the impact of sex and race variables upon unemployment of 14- and 15-year-olds in 1979.

TABLE 5-2

Unemployment Among 14- and 15-Year-Olds, 1979

	Unemployment Rate
All workers	15.4%
Boys	16.6%
White	14.2%
Black and other	39.8%
Girls	14.0%
White	11.0%
Black and other	48.3%

(Lewis-Epstein 1981)

Lewis-Epstein (1981) reported that, during the week of his study, 28.5 percent of black sophomores were employed, compared to 44 percent of whites. Berryman and Schneider (1983) also reported similar variations with regard to sex and race.

A variety of factors may account for the increased employment rate among students. First, flexible school scheduling and programs such as work-study projects favor youth employment. Second, the higher holding power of schools today means that many students who would have dropped out 50 years ago to go to work are now in school. Third, changes in the labor market, such as the expansion of retail food outlets, has created a demand for part-time labor appropriate for adolescents. Finally, societal or economic factors may have contributed to increased motivation among students to work so that working while attending school is socially more acceptable than previously.

Not only are more adolescents involved in the labor force, they are devoting more time to work. By 1970 a majority of 16-year-olds who worked were investing more than 14 hours per week in their place of employment. Eighty percent of 14- and 15-year-olds (Westcott 1981, p. 66) worked one to 14 hours in 1979.

Most of these working students were involved in retail, unskilled labor, or service positions. According to Westcott (1981), the Federal Fair Labor Standards Act effectively prohibits students from many manufacturing or processing jobs because of the safety factors involved. Table 5-3 summarizes occupations held by 14- and 15-year-old boys and girls in October 1979.

Student decisions to participate in the labor market seem to be motivated by a variety of factors. Greenberger and Steinberg (1982) indicated that the desire to earn spending money predominates. DeVault (1982) related increasing youth employment to economic independence. Thus, working becomes an important component of the development of an independent self. Table 5-4 lists reasons for student employment reported by Berryman and Schneider (1983).

TABLE 5-3

Occupation of 14- and 15-Year-Old Boys and Girls Enrolled in School, 1979

Occupation	Total	Boys	Girls
	[in thousands]		
Total enrolled in school	1,206	669	537
Percent	100.0	100.0	100.0
White-collar workers	24.1	28.9	18.2
Professional and technical	1.2	1.0	1.3
Sales	17.7	24.7	9.1
Clerical	5.2	3.1	9.1
Blue-collar workers	18.2	30.0	3.4
Craft and kindred	.7	1.2	(-)
Operatives, except transport	3.1	4.3	1.5
Transport equipment operatives	.2	.3	(-)
Nonfarm laborers	14.3	24.2	1.9
Service workers	48.6	27.7	74.7
Private household	27.9	5.2	56.1
Other	20.7	22.5	18.6
Farmworkers	9.1	13.5	3.7
Managers	.2	.3	(-)
Laborers	8.9	13.2	3.7

(Westcott 1981, p. 68)

TABLE 5-4

Students' Reasons for Taking Jobs

Reason Cited* Ranks	Percent	Most Important Reason Ranks	Percent
1 Spending Money	82.5	1 Luxury Items	20.6
2 Luxury Items	69.4	2 Spending Money	19.7
3 Work Experience	53.3	3 Work Experience	17.0
4 Something To Do	44.5	4 Auto	15.1
5 Auto	43.5	5 College	12.4
6 College	29.0	6 Help Family	5.8
7 Get Away From Home	26.7	7 Something To Do	4.1
8 Meet People	25.7	8 Get Away From Home	2.5
9 Help Family	12.7	9 Meet People	1.9
10 Meet School Requirements	7.2	10 Meet School Requirements	.8

*Multiple reasons, total exceeds 100 percent.

Berryman and Schneider's analysis suggested that as age increased, saving for luxury items became a less important factor. However, defraying automobile expenses and assisting the family became more important. These researchers did detect demographic variations. Black or urban students were less likely to list automobile expenses as a motivator, while white suburban students were most likely to. Berryman and Schneider (1983) summarized their findings as follows: "The pervasiveness of individualism and materialism in American society, the diminished importance of children as an economic asset, the importance of the automobile and of a college education are all clearly reflected in these students' responses."

Berryman and Schneider (1983) also reported that a variety of factors influence students' decision to leave a job. The most common reasons were interference with school activities, low pay, and problems with completing class work. Age, sex, and race variables influenced these reasons. Older students were less likely to indicate that low pay prompted their departure from a job, but they were more likely to offer a negative impact upon school work as a reason. Males, especially white suburban males, were most likely to quit a job because of its negative impact upon school activities. Low pay was more important to males than females, especially among blacks. White females reported that school work was an important factor. Completion of school was more important to black students

and white females than for white males. Peer-oriented responses, such as "interfered with school activities," were, not surprisingly, rated as much more important than concern about academic performance.

A variety of factors also seem to account for some students' never holding a job. Berryman and Schneider's (1983) findings in this regard are summarized in Table 5-5.

TABLE 5-5

Students' Reasons for Never Having a Job

Reason Cited*		Most Important Reason	
Ranks	Percent	Ranks	Percent
1 Don't Have Time Because Of School Work/Activities	48.1	1 Don't Have Time Because Of School Work/Activities	36.7
2 Don't Know How To Find One	29.2	2 Don't Know How To Find One	16.4
3 Tried, But Couldn't Find One	22.1	3 Tried, But Couldn't Find One	13.3
4 Don't Have Time Because Of Home Responsibilities	19.9	4 Don't Have Time Because Of Home Responsibilities	9.7
5 Not Interested In Available Jobs	16.8	5 Not Interested In Available Jobs	8.4
6 Don't Need Money	13.7	6 Parents Disapproved	6.6
7 Parents Disapproved	11.9	7 Don't Need Money	5.8
8 Low Pay	6.6	8 Low Pay	2.2
9 Friends Don't Work And Disapproved	3.5	9 Friends Don't Work And Disapproved	1.0

*Multiple reasons, total exceeds 100.

It is especially important for educators to note that the second-most-prevalent reason for never having a job was not knowing how to find one.

Participation in the labor market appears to be a mixed blessing. While such participation has some positive aspects, it also has negative consequences, especially for students who work more than about 15 hours per week. Greenberger and Steinberg (1982), after an extensive cost-benefit analysis of student employment, reported

the following:

1. Working youngsters show gains in self-reliance, but they rarely exceed minimal job requirements such as punctuality.
2. Work experience provides little opportunity for cooperation or interdependence.
3. Almost half of the sample felt that their work benefited others.
4. Workplace contact with adults is limited.
5. Working may facilitate the acquisition of practical knowledge, especially knowledge of business practices, financial concepts, and consumer matters. This effect was most pronounced among academically less talented students.
6. Few jobs required students to apply cognitive skills learned in school or to acquire new ones. Most positions held by students do not require reading, writing, or mathematical computation.
7. Certain jobs, especially retail sales, may promote the development of interpersonal skills.
8. Employment prompted the acquisition of a work ethic including persistence on a task, resistance to distractions, and job satisfaction.
9. Employment influences values with regard to desirable job characteristics. The importance of exercising authority decreases in importance, but a need for creativity increases.
10. Employment does not influence long-term occupational goals.
11. Employment decreases students' involvement with school. Working students are less involved in activities and spend less time studying. These results are most visible among students who work more than 15 hours weekly.
12. Employed students have higher rates of school absenteeism.
13. Employment may result in lower academic performance. This trait is most prevalent among students working 15 or more hours per week.
14. Job stress may contribute to increased psychological symptoms among working girls.
15. Employment correlates positively with increased use of cigarettes, alcohol, and marijuana.
16. Stressful working conditions correlate positively with increased cigarette, alcohol, and marijuana use.

17. Income differences among workers and between workers and nonworkers do not account for increases in substance abuse.
18. Approximately 60 percent of the sample reported theft or committing some form of deviant behavior during the first nine months of employment.
19. Employment may contribute to the formation of cynical attitudes regarding the intrinsic value of work.
20. There is no evidence that employment deters delinquency.
21. Employed youngsters spend less time with their families.
22. Employment has no impact upon time spent with friends, but does result in decreased closeness.
23. The workplace does not contribute to the development of new friendships.
24. The adolescent job market is characterized by stereotyped employment opportunities.
25. Males earn more than females.

Young Adolescents as Consumers

Participation in the labor market is not the only economic function assumed by young adolescents. Young adolescents play a significant role as consumers. Wass (1965) found evidence of this consumer potential in the millions of dollars spent on marketing efforts targeted at teenagers. Nichols and Powell (1979) reported that adolescent spending had grown from five billion in 1950 to 26.1 billion in 1976. Schug (1982) concluded, "Large parts of the clothing, music, food, movie, and auto industries are targeted to meet the demands of young people. Whole industries, from pinball machines to used cars, depend to some extent upon the youth market." Greenberger and Steinberg (1982) reported that most adolescent income is spent in a manner that reflects the peer culture: "Cars, records, extra clothing, cigarettes, alcohol, and marijuana." Nichols and Powell (1979), using a sample of 13- to 15-year-olds, reported that girls commonly spent for clothing, recreation, personal grooming articles, meals away from home, and school expenses. Boys spent for recreation, snacks, meals away from home, clothing, and hobbies. While the above studies included the entire adolescent age group, there is no reason to suspect that the findings do not hold true for the young adolescent segment of that group.

The impact of youth as consumers, however, is not simply limited to their own purchases. Wass (1965) reported that in his sample, 55 percent of the respondents indicated that the last family car purchased was the make they wanted. In addition, they reported influencing family purchases in the areas of food, home furnishings, and a "majority of other buying decisions." This finding suggests that the consumer power of adolescents penetrates deeply into the fabric of the American economy.

Adolescents derive knowledge of consumer issues from a variety of sources. Wass (1965) suggested that other teenagers and the mass media play a major role in the formation of consumer values. This is hardly surprising, given the pervasive nature of mass media advertising and the importance of the peer group. Nichols and Powell (1979), in a study that may be skewed because of the predominantly rural and small town composition of the sample, reported that adolescents rated the following as their most important sources of consumer information: parents' comments, friends' comments, personal observation and examination of store displays, labels and warranty information, and 4-H projects. Thirteen- to fifteen-year-olds indicated that television advertisements were a major source of information and that they also relied upon the county extension office for information. Finally, work by Moschis and Moore (1983) suggests that students who have received consumer information in school use that information when involved in the marketplace.

Middle-Level Students' Learning of Economics

Students' Ability to Learn Economics

An overwhelming amount of research focuses on young students' ability to learn economics. Most of this research was done during the 1960s and 1970s, shortly after the development of nationally-normed tests of economic understanding. The results of the studies were summarized by Dawson (1977), who concluded that students at almost any age level in elementary and secondary schools can learn economic concepts in a structured school setting. Student ability to learn economics did vary with maturation levels, socioeconomic status, academic ability, reading ability, and motivation, but each study demonstrated students could perform better on

posttests after instruction in economics than they did on pretests.

This conclusion has been verified and refined in more recent research. Studies have concentrated on learning style differences (Martin and Bender 1985), teacher training levels (Walstad 1980), and school district curriculum emphasis (Buckles and Freeman 1984; Walstad and Soper 1982). They concluded that students can learn economics, then attempted to pinpoint personal characteristics or institutional features that enhance or minimize the depth of economic learning that has taken place.

These findings are not surprising. Economic content, like most academic content, can be taught successfully to students. Nothing unique about the discipline's form, language use, or symbolic structure presents a learning problem. It is more like English, history, biology, than it is like fourth-dimensional mathematical analysis. If economics is presented as a "typical" academic discipline with informational content and conceptual categories, students should be able to learn it as well as any other content area. There is a solid research-based rationale to justify economic instruction. It is an area students are capable of learning.

What Middle-Level Students Know

Although students as employees and consumers have a significant impact upon the American economy, they appear to have limited knowledge of the economy. Wiley (1977) and Fleiger (1977) described serious deficiencies in economic knowledge among middle-level students. Thirteen-year-olds in 1972 and 1976 scored only 47.7 percent and 50.5 percent on the economics section of the National Assessment of Educational Progress (NAEP 1978, p. 6). Examples of student performance on the 1978 NAEP consumer economics test include:

1. Twenty-five percent of the 17-year-old students did not know that the government does not guarantee private business a profit.
2. Twenty percent did not know that power companies generate power to make a profit.
3. Forty-four percent did not know that inflation hurt individuals on a fixed income.
4. Less than half of the students knew that libraries are supported through taxes.

5. Thirty-five percent did not know that credit purchases increased fixed expenses.
6. Seventy-five percent did not know that finance companies had the highest interest charges on a loan.
7. Only 30.9 percent knew the meaning of unit pricing (NAEP 1978).

These findings indicate that general knowledge of the economy and of consumer matters is weak. If 17-year-olds have such limited knowledge, it is likely that young adolescents are even more poorly informed.

Student Reasoning and Cognitive Development

On the subject of economic reasoning little research exists. Two reasons account for this dearth of research. First, economic reasoning is given lip service in most economic curricula, but little is actually done to develop it. It is easier with current materials to teach economic information and concepts without defining and teaching reasoning. Second, the national tests of economic understanding focus on economic information and concepts. No tests exist to measure reasoning ability.

Some pioneering work has begun in this area. Recent research by Burris (1976), Ward and others (1977), and Fox (1978) found that young people's reasoning about economic ideas follows the basic precepts of cognitive development theory. Unfortunately, none of these studies attempted to clarify what was meant by economic reasoning. The studies dealt with personal or consumer issues as viewed by young children, categorizing their impressions (or usually their misimpressions) of the adult economic world.

More recent work by Schug (1981, 1983) reveals information more closely related to economic reasoning as a deductive intellectual task performed by a student. Most of Schug's work has been with elementary-age children, in whom he found that economic reasoning develops in a stage-like manner similar to Piagetian stages of cognitive thinking. Apparently the content of young people's reasoning about economic ideas becomes more abstract, other-directed, and flexible with increasing age, up to ninth grade—the highest grade level involved in his research.

More closely related to the focus of this paper were the three types of economic reasoning Schug observed students exhibiting: (1) unreflective, (2) transitional, and (3) reflective. Unreflective reasoning is characterized by three attributes. First, such reasoning is based on the physical characteristics of the object or process being discussed. Shape, size, color, and observable behavior are examples of characteristics that seem to distract attention from other variables more useful in understanding the economic concept. Second, the reasoning is characterized by behavior or ideas that focus directly on the individual, evidence of egocentric thinking characterized by a student's difficulty in understanding that others may have differing points of view. The third feature of unreflective economic thinking is difficulty in understanding cause-and-effect relationships. For example, unreflective reasoning tends to confuse causes with effects and treat variables as interchangeable.

Transitional economic reasoning is characterized by the ability to focus on several dimensions of a problem without being distracted by physical characteristics. This type of reasoning is more flexible and considerate of other points of view. Transitional responses are limited, however, because the reasoning appears tied to concrete events or ideas within the students' own experiences.

Reflective economic reasoning is based on the ability of students to use abstract ideas. Reflective responses involve formulating hypotheses about ideas and events beyond immediate experience. Recognizing changes over time, making value statements, and setting criteria in making decisions are considered to be examples of reflective thinking. Reflective reasoning also involves ideas about broader community or societal concerns, being less focused on the self. Examples of societal concerns are statements about societal traditions, social contract, and human nature.

Remarkably, in Schug's study reflective reasoning was well developed at grade four. The reader is cautioned that the young people in the Schug study were relatively atypical, coming from an affluent suburban area. However, it appears reasonable to expect students aged 12 to 15 to perform reflective economic reasoning as part of their social studies curriculum.

School Dropouts

It is clear that the young adolescent is participating in the economy, both as worker and consumer, at greater rates than in

previous decades. The significance of the young adolescent in influencing purchasing (and thus marketing) decisions cannot be overlooked. We also know that students in the 12- to 15-year-old age group are capable of learning economics.

We have already reported that economics is not part of the school curriculum at the middle/junior high school level. Economics is, however, offered in many larger high schools for juniors and seniors. But how many students will have an opportunity to encounter an economics course in senior high school?

It is reported that about one-fourth of the 18-year-olds in the United States have not completed high school ("Dropouts: Who and Why?" Education USA 1986). At a time when there is pressure from many quarters to achieve excellence in education, we find that there has been very little progress in reducing the dropout rate. The national average dropout rate remains the same as it was 20 years ago—25 percent ("A Problem That Persists." Education USA 1985). (A dropout is defined as a student who leaves school after the sophomore year or a student who does not complete high school during the same year as his/her ninth-grade class.) In contrast, the dropout rate below the 10th grade is about two percent (Frankel 1978).

With respect to economics instruction, one in four students will never have the opportunity to learn about the economy at the high school level. In many respects this is tragic in that dropouts need to have at least some fundamental knowledge about the nature of the economic system and how it works, as they are entering the economy on a full-time basis. If we want all students to have some fundamental economic knowledge, it is important to incorporate economics at the middle/junior high level when the dropout rate is negligible. Incorporating economics at the middle/junior high school level will enable the 12- to 15-year-old learner to gain some sense of economic institutions and some knowledge of the forces that prevail in the marketplace.

Economic Socialization

How young people are socialized into our political and economic system is worth exploring. Socialization is the means all societies use to integrate individuals into the community and to maintain the social system. Understanding how political and economic ideas

emerge in young people gives clues to how the process of socialization works. It can also help educators shape the development of values and attitudes necessary to our republic.

Research on the development of political beliefs of young people took place in the 1960s and 1970s, mainly at the University of Chicago. The following are some of the primary conclusions that can be drawn from this research.

1. Political attitudes begin to take shape very early in life. As early as second grade, children have acquired some concept of government, framed around personal figures such as the president, police officer, or mayor. By the time youths enter ninth grade, most of them can respond meaningfully to a variety of political questions, have read about and discussed candidates, have engaged in some low-level political activity, express preferences for political candidates, and have established opinions about the political system.
2. Attitudes, opinions, and behavior established by the end of elementary school correspond closely to those of adults. Young adolescents are moving away from the personalized, highly benevolent images of government toward the more abstract and realistic conceptions held by adults.
3. Young adolescents have developed a more refined view of the "good citizen," with a general interest in public affairs, participation in the electoral process, and obedience to the laws being the primary defining characteristics.
4. Young children view all laws as fair, believe the government rarely makes a mistake, and think the President is responsive to the needs of individual citizens. Young adolescents are more realistic, acknowledge a greater amount of unfairness, reveal less heroic pictures of government leaders, and show an awareness of the distinction between roles and the people who fill them.
5. Children's attitudes toward the political system are highly positive, reflecting little of the cynicism or distrust of politics expressed by many adults.
6. The development of thinking about political problems follows the pattern predicted by cognitive development theory, especially the stage-related ideas developed by Jean Piaget.

7. Several studies pointed to the family as the most important institution in shaping children's political attitudes.

The pattern emerging from this research has been used to illustrate the importance of young adolescence as a period of development for political attitudes and beliefs. Furthermore, the existence of this pattern has been used to suggest the need for active intervention to shape and enhance the development of these understandings. Recent research, supported by the Foundation for Teaching Economics, has shown that through the use of a text (*Our Economy: How It Works*) student attitudes with regard to the economic system, business, personal economic efficacy, treatment of workers, and the economic status quo can change significantly when compared with students not using an economics text (Ingels and O'Brien 1985, p. iv).

An important question for economic educators is to what extent, if any, the conclusions of political socialization research can be generalized to economic socialization. In one sense, the more obvious and personal aspects of the political system might seem to make the connection between economic and political socialization remote. For example, there is no parallel between the President and anyone in the economic system. Political party membership, family discussions of political issues, the existence of specific laws personified by police officers all seem to give dimensions of political socialization more concrete referents. Even the weak efforts at student school governance through student councils at least give some concrete illustration of our political ideal.

On the other hand, economic experiences touch every aspect of our lives. Children at early ages display a pronounced interest in the world of work. Many are busy identifying, trying to understand, and role-playing the various career models they observe. In addition, families are deeply influenced by changing economic conditions. Economic fluctuations strongly affect family feelings of security, often producing severe stress. Low-income and single-parent families are especially affected by economic changes. As with politics, economic issues frequently are subjects of discussions. Perhaps most important is the point made earlier that young adolescents are becoming more active in the economy in their roles as workers and consumers. Adolescents sometimes take on roles that resemble enterprenuers. Jobs—such as having a paper route wherein a young person

is responsible for delivering a product, collecting payment, and keeping a portion of the revenue for "profit"—further enhance the exonomic experiences of young people in this age group.

If one can generalize from political socialization to economic socialization, then we could expect:

1. Children's economic attitudes begin to take shape at a young age.
2. Middle school years are a key time in the development of economic attitudes.
3. Young adolescents have an increasingly realistic view of the economic system.
4. Family, as well as other institutions, play an important role in economic socialization.

A growing body of research on economic socialization is leading to some conclusions parallel with those from political socialization research. Economic socialization research frequently uses interviews with young people about different forms of economic activity and problems. Furth (1980) has delineated four developmental stages that he calls monetary understanding. These stages may be exhibited by a child trying to make sense of a shop's business. The child is assumed to have had firsthand experience buying something at a store. The basic stages are:

1. No understanding of payment.
2. Understanding of payment of the customer but not of the shopkeeper (6 to 7 years).
3. Understanding and relating of both the customer's and the shopkeeper's payment, but not profit (8 to 9 years).
4. Understanding of all these things (10 to 11 years). The youngster clearly enunciates the notion of selling at a higher price than the product was purchased. The shopkeeper is seen for the first time as making a profit.

Similar studies by Schuessler and Strauss (1952), Strauss (1952), Burris (1976), Ward and others (1977), Fox (1978), Armento (1982), Schug (1983), and Schug and Moon (1986) all found evidence that economic reasoning emerges in a manner consistent with cognitive development theory. Each study was strongly influenced by the work

of Jean Piaget and suggested that stages of economic reasoning correspond with general stages of cognitive development.

Evidence that economic reasoning emerges according to the stages of cognitive development is confirmed by two British researchers, Furnham and Thomas (1984), who reviewed cognitive and social development literature as well as economic education literature from Europe. They state,

> Yet all the literature from highly diverse samples has suggested the relevance of age-related qualitative changes in children's economic ideas and practices. That is, children and adolescents pass through qualitatively different, sequentially hierarchically integrated stages, each of which forms a structured whole. However, whereas the child in the formal operations period may be fairly sophisticated with regard to his/her understanding of the physical world, it seems from research into developmental social cognition that conceptions of the economic world are not yet fully developed at this developmental stage.

Summary

Young people, including the young adolescent, are important actors in the economy, both as workers and consumers. The degree of economic participation on the part of the 12- to 15-year-old has grown in importance.

Labor force participation by the young adolescent has increased significantly in the past 40 years. The participation is due in part to school-related work opportunities and the increased demand for part-time employees, especially in the retail food industry. The primary motivations for working seem to be the desire to earn spending money and to express individual independence.

Labor force participation of the young adolescent is a mixed blessing, however. In many cases, little is actually learned about economic activity through participation in the workplace. Also, employment may mean less involvement in school activities, lower academic performance, and an increase in deviate behavior.

A rather startling research finding is the extent to which young people (including young adolescents) influence certain markets as a result of their spending power. Also significant is young people's substantial influence on buying decisions of the entire family. While

the young adolescent has a significant role in consumer decision-making, there is evidence that economically rational choice-making is not always put to use in purchasing; that is, decisions are not always made through economically rational choice-making.

Yet, one in four students may never have the opportunity to learn economics. They will have dropped out of school. If we want all students to encounter economics, the subject needs to be included in the middle school curriculum.

Young people can learn economics. However, there are serious deficiencies in the economic knowledge of the middle-level learner. These deficiencies are not too surprising, given that economics is not generally considered a "core" content subject in the middle/junior high school curriculum. It is encouraging, given a definition of economic literacy as the power to reason accurately about economic affairs, that more recent, but less complete, research confirms that students aged 12 to 15 are capable of reflective reasoning.

Also, economic understanding clearly seems to develop in a manner that is supportive of cognitive development theory and of Piaget's ideas in particular. Instruction in basic economic knowledge can begin early in the elementary school, if such instruction is tied to children's personal economic experiences. However, we know that young elementary children are reasoning about economic problems in a literal and superficial fashion. The majority of young people in the intermediate grades are moving to a more advanced understanding of economic relationships. The research suggests that the intermediate grades are a time of rapid development of economic understanding and are therefore a reasonable time to emphasize economic understanding.

Some parallels between economic and political socialization appear to exist. Both begin at young ages, show rapid growth and increasing sophistication during the middle school years, and follow the basic patterns predicted by cognitive development theory. This conclusion suggests that the middle school grades are an appropriate point in the curriculum to give special attention to economic education.

Chapter 6

MIDDLE SCHOOL ECONOMIC EDUCATION

This chapter opens with a discussion of the aspects of economics that make it an especially suitable area of study for the middle-level learner. Implicit in the discussion are the benefits to be derived by the student. The second section identifies six major goals for middle-level economic education. Additional benefits related to achievement of these goals are enumerated.

The chapter concludes with a blueprint for economic education for the middle-level learner. Three aspects of designing an economic education program are addressed: complementing learner and school characteristics, identifying the assumptions underlying economic reasoning, and selecting economic content.

Economics and the Middle-Level Learner: Toward a Rationale

Economics is a subject well-suited for study by the 12- to 15-year-old student. It allows parallel development of students' introspective and extrospective examination of human activity. Students at this age level are confronted with dramatic changes in their emotional, psychological, social, and physical beings. At the same time, they are beginning to be held responsible for actions they take as part of these dramatic changes. The range of alternatives faced by students in the 12 to 15 age range increases dramatically, presenting them with the necessity to make choices and handle all the resulting consequences. The alternatives, choices, and consequences all seem very new, extremely important, and highly risky to the

adolescent. Many of the responsibilities are new, and the alternatives are extraordinarily diverse. Students unaccustomed to responsibility sometimes deny it or handle it badly. The study of economics can help students cope with new responsibilities.

Economics is the study of choices—the choices individuals make for themselves, choices made for them by others, and choices made by individuals for others. Usually, the choices deal with such material concerns as: Why does one work? Who will employ me? How are wages and prices determined? How does one gain food, clothing, and shelter? Why do other people assist us in our search for material well-being? Adolescents' study of economics is not and should not be restricted to material matters, however. Economic reasoning also can provide powerful insights into choices regarding human relationships, such as dating, friendship patterns, drug use or non-use, religious affiliations, and athletic competition. Students can analyze these matters introspectively to understand how they, as human beings, must deal with alternative choices regarding their own expectations.

Economic study can also encourage extrospective analysis of the world. Choices are faced by all people, regardless of culture, geographic location, age, or political belief. After learning how choice-making influences their own lives, students can apply the principles of choice-making in analyzing others' choices.

As the young adolescent becomes aware of the economic world and as that awareness grows and becomes more complex and realistic, earlier affective commitments may weaken and a more cynical and critical perspective may develop. Such a change is to a degree inevitable, as the media and personal experiences often foster negative economic education. Presenting students with positive examples of successes of the U.S. economic system is therefore appropriate. Economic success stories are likely to inspire students to want to be successful themselves. As we concluded in the previous chapter, the middle grades are a time of rapid development of economic understanding and thus a reasonable time to introduce this understanding.

Goals for Middle School Economic Education

The goals of a middle/junior high school economic education program should be to develop in the 12- to 15-year-old learner the

knowledge, reasoning abilities, and dispositions necessary for these learners to become successful participants in the economic system of the United States. These goals are predicated on the belief that through the economic education of youth the U.S. economic system can continue to be viable and dynamic.

In order to accomplish this mission, middle school students must:

1. Develop a commitment to the basic values of the American economic system.
2. Recognize the basic features of the U.S. economy that distinguish it from other economic systems.
3. Become aware of the strengths and problem areas in our mixed market economy.
4. Actively construct new meanings about the nature of their own economic behavior (what they choose to do) and the economic behavior of the people in the world.
5. Apply an economic reasoning framework and thinking skills to fundamental human issues, dilemmas, and moral questions.
6. Develop a healthy skepticism toward such matters as issues stated too simply, issue options defined too narrowly, solutions that imply little or no cost, or solutions that are devoid of humane considerations (e.g., people's feelings, values, preferences).

If these goals are achieved, young people will make progress toward developing several aspects of good citizenship. These include:

1. Wise behavior in personal economic roles as consumers, savers, and workers.
2. Curiosity about the economic activities in both the private and public sectors.
3. Informed voting behavior about economic issues.
4. Appreciation of the economic interdependence between regions of the world.
5. Recognition that individuals can increase the power over their own lives by knowledgeable choice-making.
6. Demonstrated attitudes and values that contribute to economic and social progress.

7. Caution toward simple answers to complex economic problems.
8. Awareness that well-intended solutions often have unintended consequences.

An Economic Education Blueprint for the Learner Aged 12 to 15

Complementing Learner and School Characteristics

A high-impact economic education program for students in the 12- to 15-year-old age group must define its goals to improve student economic literacy through instruction complementary to learner and school characteristics. This recommendation has three important corollaries:

1. Students aged 12 to 15 can become economically literate without full mastery and understanding of the structure and technical vocabulary of the discipline of economics.
2. Students aged 12 to 15 need challenging learning tasks that actively involve them in the learning process.
3. Students aged 12 to 15, being in transition from concrete to formal operational thought, should be presented with instruction based on concrete learning tasks that recognize young adolescents' emerging capacity for abstract thought.

These three corollaries do not deny the existence of a structure (or alternative structures) of the economics discipline. Neither do they deny the usefulness of discipline structures to the curriculum developer. However, they do release curriculum developers from many of the constraints that have guided development of numerous past economic education projects. These constraints have often included an implicit demand that economic content (and thus literacy) be defined as full knowledge of the structure of the discipline.

Economic literacy could be defined as the ability to use economic reasoning accurately. John Maynard Keynes has argued:

> The theory of economics does not furnish a body of set conclusions immediately applicable to policy. It is a *method* rather than a doctrine, an apparatus of the mind, *a technique of thinking* which helps its possessor to draw correct conclusions (Keynes 1936).

Such a definition of economic literacy can accomplish several things:

1. It limits the amount of substantive content that must be treated.
2. It opens new fields of inquiry for students to reason about—areas of interest to the middle-level student.
3. It encourages instruction in logical reasoning techniques and in critical thinking.
4. It defines an active learning role responsibility for the learner.
5. It allows the content to have a broad cross-cultural and international focus.
6. It invites investigation into important human conflict situations at the individual level and at the group (aggregate) level, in both monetary and nonmonetary situations.
7. It reinforces the conception that people should respect the unique individuality of all people.

Assumptions Underlying Economic Reasoning

Economic reasoning is typically a deductive process beginning from a small number of basic assumptions about human beings. These assumptions and deductive reasoning techniques are used to explain human behavior. The method of analysis is thought by many, both in and out of the economics profession, to constitute the unique and most productive contribution the discipline has made to social scientific thought.

A very important qualification is necessary here. Economic reasoning can be used to investigate much of human behavior. It yields important insights into human behavior, but it is not a complete explanation of human behavior. Insights from anthropology, political science, psychology, psychiatry, sociology, and philosophy are also necessary to reach a more complete understanding of human beings. Economic reasoning provides valuable, complementary insights into the study of people. It is certainly not a substitute for other subjects.

An important aspect of rationale-building is sharing the assumptions of the builder of the rationale. We propose eight assumptions that constitute an underlying foundation for the study of economics at the middle/junior high school level. This is not an

exhaustive list, but rather a series of statements based on the authors' judgment of their relative importance to economic inquiry and relevance to the reasoning process of students aged 12 to 15.

1. *All people choose.* The problem of relative scarcity (human wants exceed the limited resources available to satisfy those wants at any point in time) forces *all* people to make choices regardless of their age, income, etc. Recognizing this choice-making necessity is the first step in explaining much of human behavior. The necessity of choice, and recognizing that necessity, is *part* of what it means to be human.
2. *All choices involve alternatives.* A person must give up something important to gain something important. The problem of assessing relative costs and benefits is important to all decisions. Attempting to minimize what is lost (foregone) and maximize what is gained (benefit) is a fundamental characteristic of human behavior. Choices are not made on the basis of cost alone or benefits alone; instead, both factors are considered. This does not imply that people come out even on each choice (i.e., costs = benefits). Instead, human beings try to make the benefits exceed the cost in a choice-making situation.
3. *People choose purposefully.* A purposeful choice is a rational consideration of the alternatives. People attempt to make what they consider their "best" choices; they do not attempt to make bad or poor choices.
4. *People are different and hold different criteria to assess "best" choices.* Two bright, well-informed people may consider the same alternatives and make completely contradictory choices because their criteria are different. In both cases, the individual thinks he or she is making the *best* choice, although the outcomes are very different. People's choices cannot be explained unless we have some idea of what is important to the individuals.
5. *People respond to incentives in a predictable way.* Incentives are positive rewards for particular behavior. If the reward is increased, more people are likely to behave accordingly; if the reward is withdrawn, people will exhibit the behavior less frequently. Incentives may be financial, emotional, professionally enhancing, and so on. They are not limited to mere financial rewards.

6. *People are flexible and dynamic in their tastes.* People change. As people receive more and more of something they value, they value an additional amount of it less than the previous amount. Also, people are influenced by noneconomic information (e.g., advertising, information from a friend). The tendency for people to value increasing amounts of something less and less and their tendency to be influenced help explain what happens to the demand for products. These tendencies also help explain changes in fashion, car design, etc.
7. *All choices are future-oriented.* One cannot choose to change a behavior in the past. All people make choices based on an assessment of the right move for the future, and based on past experiences. Everyone operates from limited information. Thus, mistakes (about the future) are made. Choices sometimes don't work out as anticipated. The future orientation of choices puts risk and uncertainty into life.
8. *Individual alternatives are influenced by the choices of others.* We live as part of a social system, dependent upon one another. As choices of people change, so does the system of relationships. There is no system outside the actions of individuals. For example, as individuals purchase fewer U.S.-made automobiles, auto workers in this country have their alternatives for employment changed.

These premises form the basis for most economic analysis. Sharing these assumptions with students is important. Teaching economics to students without sharing the basic assumptions with them is like teaching chess without explaining how the various pieces can be moved.

Students studying economics are like Sherlock Holmes trying to solve mysteries. Each is trying to explain human behavior by examining evidence in isolation. The basic assumptions help students understand what clues to look for and which are most important when trying to solve such difficult questions as: Why are farm lands being converted to housing projects? Why do young people earn less per hour than most adults? Why do we have inflation when everyone is opposed to it?

Sharing the basic assumptions with students, instructing them on how to use the assumptions, and giving them practice with curious

problems will help students reason effectively. These actions will provide the foundation for developing economic literacy.

Selecting Economic Content

Students need a working reservoir of information about the economy to understand and use economic reasoning. We recognize that economic reasoning cannot take place in an intellectual vacuum. Students must encounter and understand some, but not all, economic information. We call this information about the *economic landscape*.

The economic landscape consists of the obvious parts of the economy encountered by a young person, aged 12 to 15. It includes such institutions as banks, churches, retail stores, schools, farms, production plants (factories), service shops, and government agencies. Students should be made aware of these institutions and how they facilitate human interaction. Students need to look beyond the surface of these institutions to examine some of the aspects of human behavior that underlie the institutions. For instance:

- Banks help coordinate the actions and aspirations of two very different groups—savers and borrowers—to the mutual benefit of both groups. The banking system also creates money, thus contributing to problems of inflation and deflation.
- Retail stores help solve difficult distribution problems for producers and consumers. Stores ration scarce products to millions of people in thousands of locations with little inconvenience to customers. Important to the study of stores are the notions of supply, demand, price, market, and opportunity costs.

In the same manner, other institutions in the economic landscape provide opportunities to teach economic reasoning (e.g., why would someone decide to give $60.00 per month to a church?). The level of sophistication and the number of concepts introduced are dictated by the capability of students in the 12- to 15-year-old age group.

A second way to investigate the economic landscape is to focus on products and services of interest to students. These might include fast food, music, clothing, hair styling, and so on. By examining the kinds of choices individuals (peers) make with respect to purchase/nonpurchase of these (and other) kinds of products and services, students can develop many aspects of economic reasoning.

A third way to look at the economic landscape is through social roles. Young adolescents are already aware of many of the roles individuals play in life and become more aware of these roles as they mature. These roles include consumer, worker, friend, family member, member of social groups, and citizen. Each role implies certain kinds of decision-making. Roles provide excellent springboards for examining various aspects of human behavior. In addition, identifying the roles in certain situations provides the opportunity to examine moral dilemmas, value conflicts, and societal values. It is particularly important to provide students with opportunities to examine their own community and the various roles individuals take on in the community. The local community is a tangible and rich resource for economic study.

The following eight generalizations serve as a guide to selecting content related to the activities of the U.S. economy.

1. The U.S. economy is a decentralized system. No one runs it and yet everyone runs it.
2. Private and public ownership of resources results in very different uses (and abuses) of resources. The major reason for use difference is the incentive system related to ownership.
3. The U.S. economy is based on voluntary participation, especially in its most competitive areas. No one *has* to do anything. Success in the U.S. economy relates directly to getting other people to agree voluntarily to cooperate with you.
4. Markets permit voluntary exchanges between people. Most economic activity in the United States takes place in markets.
5. Competition among buyers and sellers in markets is considered a healthy activity. Competition reduces costs and rewards efficiency.
6. Consumer sovereignty has a major impact on producer decisions.
7. The U.S. economy encourages people to choose what actions to pursue. Individuals are free to take their own actions. Also, they are required to accept the consequences of their own actions.
8. Taxes and government expenditures are part of the nonvoluntary part of the U.S. economy. Governments (federal, state, local) can set laws that require tax payments. These payments represent

a coercive (nonvoluntary) aspect of the economy. Through representation, decisions are made to spend tax funds, presumably for the public benefit (e.g., for schools, defense, highways).

Summary

Students aged 12 to 15 are confronted with dramatic changes as emotional, psychological, social, and physical beings. Students in this age range are beginning to confront many aspects of their lives which are economic in nature. They are beginning to be confronted with economic alternatives, demanding choices which lead to consequences. Therefore, the introduction of economic understanding for the 12- to 15-year-old is both reasonable and important.

Sound economics instruction needs to present challenging learning tasks which actively involve the learner and which recognize young adolescents' emerging capacity for abstract thought. A cornerstone of this chapter is that economic literacy is the ability to use economic reasoning accurately. To this end, we have stated major assumptions underlying economic reasoning, most of which examine the nature of choice-making. We offer eight generalizations to serve as a guide in selecting content related to United States economic activity. We stress student examination of three aspects of the *economic landscape*: (1) institutions in the economy encountered by the young adolescent; (2) products and services of interest to the young adolescent; and (3) social roles played by and observed by the early adolescent.

Economics instruction for the 12- to 15-year-old learner can be accomplished without teaching the full range of ideas and vocabulary from the economics discipline. The goals stated in this chapter rest on the assumption that to become effective, participating citizens, and for the U.S. economic system to remain viable and dynamic, students need a basic understanding about how our economy works and a method of analysis to examine the economy. Finally, economic reasoning is learnable. Learning to reason economically can contribute markedly to the entire educational process of the young adolescent.

Chapter 7

CONCLUSIONS AND RECOMMENDATIONS

One purpose of this chapter is to highlight the conclusions from research which have implications for economic education at the middle/junior high school level. We offer eight conclusions on the following topic areas—nationwide interest, the nature of middle/junior high schools, the social studies curriculum, economic self, economic understanding, student development, economic learning, and economic attitudes. The conclusions are succinctly stated. The reader is encouraged to refer to previous chapters for further explanation of each conclusion.

Another purpose of the chapter is to offer four recommendations to the Foundation for Teaching Economics. The recommendations follow from the eight conclusions. The recommendation categories are: collaborative relationships, the middle/junior high school, curriculum materials development, and research.

Conclusions

Nationwide Interest. There is widespread interest in and support for precollegiate economic education. The evidence includes powerful recommendations from prestigious national commissions and mandates on economic education in over half the states. The national commission recommendations and the state mandates are a powerful force to encourage, promote, and implement economic education at the middle/junior high school level.

Middle/Junior High Schools. Middle/junior high schools appear to be open to change. This is especially the case if a middle

school is in the process of considering a child-centered approach to program development, with attention to the personal interests of students, basic skill development, and opportunities for a student's personal, social, and cognitive development. The goals of a middle school fostering a child-centered program and the goals of economic education are highly compatible.

The Social Studies Curriculum. The K-12 social studies curriculum, in which economic content would fall, has been in place for about 70 years. In grade levels K-5 and 10-12, the curriculum is considered "set" and not easily altered. In grades 6-9, the middle/junior high school grades, the curriculum is less firmly established, with the exception of U.S. history at grade 8. There are viable opportunities to alter the social studies curriculum in grades 6, 7, and 9.

Economic Self. The emerging "social self" of young adolescents necessarily involves an emerging sense of "economic self." The time of young adolescence is an appropriate time to broaden both the social and economic perspectives of the 12- to 15-year-old learner.

Economic Understanding. Development of economic understanding is the result of interaction between the individual and society. The development can be either vicarious (via use of textbooks) or real (via personal experience in the economy). The economic understanding of the young adolescent can be enhanced by both in-class and out-of-class economics learning experiences.

Student Development. It is possible to create experiences and environments which have an impact on student development. Traditional "read-and-recite" curriculum will not allow this to happen. Students in the 12- to 15-year-old age range need concrete encounters with the economic landscape. Yet, cognitive challenges are important in order for the school student to maintain interest in the subject at hand. More democratic environments, in which students can collaborate and cooperate on learning tasks, also need to be created in order to provide successful learning experiences.

Economic Learning. The 12- to 15-year-old student can learn economics concepts and can learn to reason in a mature manner about economic experiences. It is important, however, to present economics content in a challenging manner and at a developmentally appropriate level. Educators must recognize the variability—

both within and between sexes—in physical, emotional, and psychological development of the young adolescent. This developmental variability demands careful diagnosis. It is necessary to provide frequent experiences that require students to maximize their own mental capacities, but which do not overwhelm the learner. Also vital is giving students opportunities to become reflective in a school setting about their "real world" encounters with the economic system.

Economic Attitudes. Economic attitudes are learned early. At the middle school level, opportunity exists to present substantive content to "flesh out" economic attitudes—to enable students to reflect on their own attitudes as a result of cognitive and social experiences. The potential exists, however, for the 12- to 15-year-old learner's attitudes to be strengthened or weakened depending on how information is presented, what is presented, and how the student makes sense of it.

Recommendations

Collaborative Relationships. The Foundation for Teaching Economics is in a unique position to encourage broad-based, nationwide support for economic education. It is important that the Foundation do so. It has independent resources, a competent staff, and a growing respectability as a sound organization committed to quality economic education for the 12- to 15-year-old learner. For some projects, such as curriculum materials development or basic research, the Foundation might become the single sponsoring agency while keeping the field fully informed of its activities. For other activities, such as teacher training or using the volunteer community, the Foundation could appropriately seek out and form collaborative relationships with other organizations engaged in economic education.

The Middle/Junior High School. Given the changing nature of the middle/junior high school in the United States, it is important that the Foundation for Teaching Economics develop a carefully thought-through plan for change. The change plan needs to take account of the following:

- Organizational patterns of the middle/junior high school.

- Educational goals of the middle/junior high school and the degree to which teachers and administrators think their goals can be enhanced by economic education.
- The social studies curriculum pattern at the middle/junior high school and how economics not only will "fit" with the existing curriculum but also will strengthen it.
- Change strategies known through research to be successful.

Curriculum Materials Development. The Foundation for Teaching Economics is encouraged to support curriculum materials development for the 12- to 15-year-old learner. It is recommended that the following research-based guidelines be given serious consideration in the development process.

- Stress that economic literacy can be achieved by developing students' economic reasoning abilities.
- Recognize that economic reasoning can be applied to a variety of situations about how the economy works. One important consideration would be to stress how the local economy, which is close to a student's experience, operates.
- Provide instruction that is attractive and challenging to students; that takes account of students' personal, social, and cognitive development; and that includes a simplified but accurate economic landscape as the content basis for instruction.
- Provide topics and examples about our economy that are recognizable to the young adolescent and should be used to engage students in exploring beyond surface characteristics. A major emphasis should be on curriculum and instruction that stresses *very active* involvement of the learner.

Research. The Foundation for Teaching Economics should consider actively promoting and supporting research on the teaching and learning of economics in the middle/junior high school grades. The research might be undertaken cooperatively with other organizations engaged in economic education. Included in a research agenda might be the following:

- The need for research on how middle school students think about economic problems and institutions. There is also a need to examine the economic values that may be emerging within this age

group. Also important to study is how middle school students think intuitively about economic problems and institutions. Understanding young people's economic reasoning and values is an important step in designing curriculum materials which would best fit the intellectual level of the students. Such a study should be designed to bring together several disciplines, including education, economics, and developmental psychology.

- A study of the economic experiences of young people in the middle-level grades. It is often argued that young adolescents are becoming more mature in their economic ideas, in part because they are becoming more involved in local economic life. Such a study would investigate in a systematic way the economic activities of the 12- to 15-year-old age group. How much are they involved in economic life as workers and consumers? What kinds of economic experiences do they have? Is there a connection between informal economic experiences young people may be having in the community and their performance on tests of economic literacy?
- The context of the school and the community in establishing economics as an important part of the middle school curriculum. Much attention currently is being given to the K-12 social studies curriculum. The middle school curriculum, especially grades 6, 7, and 9, remains somewhat uncertain. Are teachers really interested in economics at these grade levels? Are curriculum leaders and administrators interested? What about parents and others in the community? The type of economics courses (or units of study) at these grade levels might be investigated.
- Careful evaluation of materials developed with Foundation support. Are the materials effective or more effective than traditional approaches? How well have the materials been accepted? How can research-based materials development be used to influence change?

Taken together, these four recommendations hold promise for the development of a middle/junior high school economic education program for our nation's schools.

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THE FOUNDATION FOR TEACHING ECONOMICS

The Foundation for Teaching Economics was established in 1975 to foster understanding of the American economic system and an appreciation for the value of the individual within the system. Now one of the nation's major economic education organizations, the FTE engages principally in the development and dissemination of educational materials to teach young adolescents how our economy works.

The FTE has devoted its resources to developing student materials which are consistent with the principles outlined in this monograph. These materials are briefly described below:

Our Economy: How It Works. This innovative student economics textbook uses case studies describing how common products—jeans, paper, bread, and gasoline—are made to illustrate people's use of economic knowledge and skills in their daily lives. This approach makes economics understandable to young adolescents. The text's many activities provide numerous opportunities for students to interact with its content. The detailed teacher's guide provides help for teachers unfamiliar with teaching economics. The text is published and distributed by Addison-Wesley Publishing Company.

"Our Economy: How It Works" Filmstrips. This set of six 15-minute color/sound filmstrips takes students on simulated field trips to production and business locations and to see and hear employees describe, in their own way, how common products are produced. Titles are "The Jeans Story," "From Wheat to Bread," "The Story of Paper," "The Story of Petroleum," "Money and Our Banking System," and "The Role of Government in the Economy." The filmstrips and their detailed teacher's guide are distributed individually and as a set by Random House, Inc.

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FTE's approach of "real people" as role models to emphasize the importance of the individual in the economy. The film is available for rental and purchase from Simon and Schuster Communications.

Economics Today. This program uses the newspaper *USA TODAY* and its daily news stories to teach students specific economic ideas. The program lasts one period per week for eight weeks. Teachers can choose to use extension activities to expand the number of periods of instruction. *USA TODAY* is a rich source of stories and examples of economic ideas. The comprehensive teacher's guide shows how to use the newspaper most effectively. Background readings on economics help teachers who have had little or no training in economics. A unique feature of *Economics Today* is its series of two-page, full-color "edutorials" which will be published by *USA TODAY* on the days newspapers are used in classrooms. The edutorials will be highly visual, simplified economic case studies using a blend of educational and journalistic techniques. They will further explain the economic topic of that day's classroom instruction, but will also be seen by all readers of *USA TODAY*. *Economics Today* is available from Education Services, *USA TODAY*.

The FTE has also created a teacher training text, *Teaching Economics: Content and Strategies*. This pre- and in-service teacher resource text cleverly combines economic content and teaching strategies. Each three-part chapter includes economic content, a teaching strategy, and exemplary lessons that use the strategy to teach some of the economic content. The economic content provides a plain language introduction to micro- and macroeconomics. Teaching strategies especially appropriate for economics instruction are described carefully and illustrated in the classroom-ready and complete exemplary lessons. This text is available from Addison-Wesley Publishing Company.

Research projects funded by the FTE are designed to explore ways to more effectively teach young adolescents how our economy works and provide research tools. This monograph is one of the FTE's research reports.

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